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**Expanding the Central Bank Mandate in the “Soy Republic”:
An Assessment of the Impact of Central Bank Governance on
Agricultural Competitiveness and Interest Articulation in Argentina**

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Report

Presented to the Faculty of the Graduate School of
The University of Texas at Austin
in Partial Fulfillment
of the Requirements
for the Degrees of

Master of Arts

and

Master of Global Policy Studies

The University of Texas at Austin

August 2013

Abstract

Expanding the Central Bank Mandate in the “Soy Republic”: An Assessment of the Impact of Central Bank Governance on Agricultural Competitiveness and Interest Articulation in Argentina

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The University of Texas at Austin, 2013

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This paper examines the impact of a new Central Bank mandate on agricultural competitiveness and on the ability of the agricultural sector to articulate its policy interests within Argentina’s policymaking process. Reforms to Argentina’s Central Bank charter, passed into law in April 2012, loosened restrictions on Central Bank lending to Argentina’s Treasury and authorized the Central Bank to act to reduce unemployment and spur economic development. The Central Bank carries out its new mandate within a policymaking process characterized by strong presidential authority, weak political institutions, powerful provincial governments, and a budget system that politicizes the transfer of fiscal resources from the federal government to the provinces. Within these policymaking dynamics, this paper analyzes the actions of the Mesa de Enlace, an interest group coalition comprised of Argentina’s four largest agricultural producer associations, and its response to changes in Central Bank governance.

My argument is twofold. First, I argue that the new mandate in the long run will exert inflationary pressure on Argentina’s real exchange rate, a key determinant of

competitiveness for primary commodity exports, particularly soy. Public statements made by various representatives of the Mesa de Enlace indicate strong opposition to the nominal overvaluation (*atraso cambiario*) of the peso. Second, I argue that the new mandate politicizes an already-politicized Central Bank. Given the agricultural sector's waning influence in institutionalized policymaking channels, executive intrusion in Central Bank operations is economically harmful. Such government interference serves to diminish agricultural considerations in monetary policymaking and to encourage the Mesa de Enlace's exploitation of informal channels for interest articulation, creating disincentives for robust investment and causing undesired work stoppages, hoarding, and social protest.

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Chapter 1: Linking Monetary Policy, Agricultural Competitiveness, and the Domestic Economy through the Real Exchange Rate

Introduction

This paper begins with the premise that the real exchange rate is a primary determinant of agricultural competitiveness in Argentina, a country that relies on soy exports to finance macroeconomic stability and economic development. The real exchange rate compares relative prices between comparable goods in different countries and is an indication of a currency's purchasing power. Central bank policies governing the money supply and the nominal exchange rate have direct bearing on the real exchange rate and on the real prices of agricultural goods. The compelling question, then, is whether Argentina's agricultural interest groups have the incentives, means, and government access to influence monetary policy, particularly in light of recent government efforts to expand the mandate of the Central Bank of Argentina (BCRA) and increase the bank's operational flexibility.

In 2008, Argentina's four largest agricultural producer associations formed a political coalition, known as the *Mesa de Enlace* (loosely translated as the Liaison Commission but referred to from here on as the Mesa de Enlace), in order to voice collective opposition to tax increases on exports of soy and other agricultural products. Despite challenges posed by collective action constraints typical of rural interest groups, and notwithstanding the sector's waning influence in Argentina's political institutions, the Mesa de Enlace continues to serve as a vehicle for expressing the policy interests of the agricultural sector. The Mesa de Enlace's relationship with the Central Bank of Argentina (BCRA), however, acquires renewed urgency as the bank's mandate grows.

In the past decade, soy production in Argentina has become the driving force behind an export-oriented model for the country's economic growth. Between 2010 and 2012, soy exports on average accounted for \$6.5 billion USD in annual government revenue, equivalent to 5% of the government's average total annual income of \$128

billion USD (Markley 2013, 8). In 2013, soy remains Argentina's largest source of foreign currency and international reserves (Romig 2012).

Since Argentina's 2001 economic crisis, the conditions for this export-oriented economic model have been ripe. Aside from recent episodes of drought, soy production in Argentina has grown rapidly and should continue to grow, driven by favorable agro-ecological conditions, high global commodities prices, technological advances in agricultural production, and agricultural expansion into previously unproductive areas. But perhaps most importantly, Argentina's soy producers benefit from a competitive real exchange rate, the result of a massive devaluation of the Argentine peso in the wake of the economic crisis.

The impact of the peso's real exchange rate cannot be understated. According to Urbiztondo, et al., devaluation "created a new scenario where the real exchange rate once again became the key issue in defining productivity and competitiveness" (2009, 7). As Frieden demonstrates, the more a sector is oriented toward international markets, the stronger the sector's interest in the value of the domestic currency (1994, 83). Argentine soy, more than most crops, is uniquely exposed to international markets, as almost all of Argentina's soybean production is exported either in its primary form or as soy meal or soy oil.

The state, a resurgent actor in Argentina's economic processes, plays a decisive role in determining Argentina's real exchange rate through its governance of the Central Bank. The real exchange rate thus highlights both synergies and tradeoffs between the monetary interests of Argentina's agricultural producers and the interests of the state. As Urbiztondo, et al., stress, "the agricultural sector is interrelated with the rest of the economy, and the linkages are quite important." (2009, 49) In terms of synergies, Argentina's macroeconomic stability depends on the performance of the agricultural sector and the sector's contribution to the country's balance of payments. Conversely, agricultural competitiveness depends on price containment and predictability and a safe investment climate. In terms of tradeoffs, on the other hand, because public spending has

inflationary consequences, state interests are not always conducive to a competitive exchange rate.

On two occasions since 2010, political interventions in BCRA operations have borne directly on the real exchange rate. First, in January 2010, President Fernández de Kirchner forced the resignation of Martín Redrado, president of the BCRA, following a dispute over the use of Argentina's foreign reserves to pay off public debt. Then, in April 2012, Argentina's Congress passed Law 26.739, reforming the BCRA's charter and expanding the bank's mandate to include job creation and economic development through credit allocation.

These most recent Central Bank reforms eschew all remnants of the convertibility regime that governed Argentina's money supply in the 1990s. Under the convertibility regime, implemented by President Carlos Menem in 1991, the law limited the BCRA's mandate to stabilizing domestic prices. Convertibility insulated the bank from political pressures to expand the money supply and established strict guidelines for monetary operations. The law pegged the peso to the dollar at a one-to-one ratio, restricted the money supply to the bank's supply of foreign reserves, and prohibited the BCRA from lending to the federal government to finance fiscal deficits. The cornerstone of the convertibility regime was the government's formal recognition of interchangeability between Argentine pesos and U.S. dollars. Parity between the peso and the dollar in effect limited Argentina's money supply to dollar reserves accumulated either through international trade or by borrowing from international lenders.

From its outset, convertibility successfully reigned in inflation. It also instilled confidence in the Argentine economy. In combination with market-oriented structural reforms, macroeconomic stability attracted foreign capital to Argentina. Nonetheless, rigidity in the monetary system proved a mixed blessing for Argentina's productive sectors. On the one hand, new access to foreign capital greatly contributed to technological advances in various industries, including agriculture. On the other hand, the peso's parity with the dollar over time led to a significant overvaluation of the peso's nominal exchange rate. Argentina's competitiveness in world export markets suffered,

while cheaper imports drained the country's foreign reserves. Inflation gained momentum. Production stalled. As investor confidence receded, particularly in the wake of the "tequila crisis" of the Mexican peso, Argentina entered recession.

Full-blown economic crisis struck in 2001. Investors' fears that Argentina could no longer defend its peg triggered a rapid outflow of foreign capital. In the end, the government had no choice but to abandon convertibility and devalue the peso. Although the crisis brought an end to the peg, restrictions on Argentina's money supply remained in place until Argentina's Congress passed a package of reforms to the BCRA's charter in 2012. The 2012 reforms are not only a far cry from the convertibility regime of the 1990s, but also represent an explicit departure from a more orthodox central bank mandate to control inflation.

Law 26.739 establishes alternative benchmarks governing the money supply. It authorizes the central bank to increase lending to the federal government through the purchase of government bonds and allows the administration to use foreign reserves to repay foreign debt. Despite an expanded mandate for the BCRA, however, the impact of these reforms on monetary interests of the agricultural sector ironically will likely be determined by other policymaking institutions.

Argentina's policymaking process encourages inflationary tendencies that, in an environment of greater monetary flexibility, are not favorable to a competitive exchange rate. Argentina's federal executive branch, for example, has extraordinary power over the nationwide distribution of fiscal resources. Provincial governments, on the other hand, are also very powerful. Provincial party elites greatly influence the selection of Congressional candidates, and provincial governors are often present at negotiations concerning national policy decisions. This system encourages opportunistic and myopic policymaking and often results in the exchange of federal revenue for provincial support.

Meanwhile, powerful barriers preclude the Mesa de Enlace's ability to advocate for its members' long-term interests within formal governance institutions. The agricultural sector has weak ties with Argentina's two major political parties, the *Partido Justicialista* (PJ), or Justicialist Party, and the *Unión Cívica Radical* (UCR), or Radical

Civic Union, depriving the sector of influence in presidential cabinets and local governments. The lack of formal government influence also exposes the Mesa de Enlace to government tactics of exploiting divisions within the agricultural sector to weaken the sector's bargaining power.

Indeed, heterogeneity of interests within the Mesa de Enlace is perhaps the coalition's greatest weakness. The four associations of the Mesa de Enlace include the *Sociedad Rural Argentina* (SRA), or Argentine Rural Society; the *Confederación Rural Argentina* (CRA), or Argentine Rural Confederation; the *Federación Agraria Argentina* (FAA), or Argentine Agrarian Federation; and the *Confederación Intercooperativa Agropecuaria* (CONINAGRO), or Inter-Cooperative Agricultural Confederation. These organizations and their membership are territorially dispersed and represent unique sets of interests based on variance in farm size, goods produced, geographic location, and other factors. Precisely for that reason, the four groups have historically lacked cohesion and at times have clashed due to the heterogeneous nature of their membership and their competing economic visions. Where these groups have most effectively aligned has been in response to increases in export tax rates. But collective action in the agricultural sector is an exception and not the rule, and tends to occur in a reactionary manner through informal political channels, as demonstrated by the Mesa de Enlace's disruptive protest tactics in 2008.

Given Argentina's history of monetary policymaking, the characteristics of Argentina's policymaking institutions, and constraints to collective action in the agricultural sector, this paper reaches four conclusions. First, the Mesa de Enlace and other agricultural interest groups have an economic interest in the Central Bank mandate and management of Argentina's real exchange rate. Second, given Argentina's strong presidential authority (which extends to Central Bank operations), weak institutions, and system for transferring fiscal resources to powerful provincial governors, the new Central Bank mandate is potentially detrimental to agricultural interests through its impact on the real exchange rate. Third, if these groups intend to influence monetary policy, they must do so through executive channels. This will not be easy, given the sector's waning

ministerial influence and the challenges inherent to collective action for rural groups. Finally, it is far more likely that moving forward, we will see interest articulation through informal channels. Incentive structures in Argentina's policymaking process encourage episodic forms of protest in response to specific measures, such as those which occurred in 2008, rather than the formation of a long-term economic platform for the sector.

Why Argentina as a Case Study?

Argentina is a particularly strong case study for examining economic behavior in countries with a comparative advantage in agricultural production. Sanjuán-López and Dawson point to a number of developing countries in which agriculture's contribution to total exports is substantial. In Guinea-Bissau, Nicaragua, Benin, and Gambia, for example, this contribution in 2007 was 90%, 85%, 75%, and 75%, respectively. In countries with significant agricultural export sectors, a number of linkages tie exports with economic growth. Sanjuán-López and Dawson highlight four such linkages: (1) export growth may lead to growth through a Keynesian foreign trade multiplier; (2) foreign exchange from exports may finance imported manufactured and capital goods and technology; (3) competition may lead to scale economies and technological advances; and (4) the export sector may create positive externalities, such as more efficient production methods. Sanjuán-López and Dawson conclude that particularly in low-income countries, agricultural exports play a similar role to non-agricultural exports as an engine of economic growth (Sanjuán-López and Dawson 2010, 565-566, 581).

Although Sanjuán-López and Dawson are more concerned with low-income countries, in Argentina, a middle-income country, the relationship between growth in the export sector and economic growth since 2001 has been strong. Importantly, Argentina imparts valuable lessons about monetary and macroeconomic conditions conducive to growth in agricultural exports. Four lessons are detailed below, beginning with the relationship between macroeconomic instability and agricultural production, and the role of agriculture in Argentina's macroeconomic recovery following the 2001 economic crisis.

The Stop-Go Cycle and Macroeconomic Stability

For decades prior to 2001, scholars tried to explain Argentina's exceptionally low levels of economic growth and high levels of macroeconomic volatility, exemplified by frequent bouts of hyperinflation. Wiesner, for example, attributes the country's poor growth rates to high inflation, fiscal deficits, and failed attempts to establish credibility for economic policies. Behind these external systems are fundamental political economy problems and weak fiscal and political institutions (2008, 102). What has become known as the "stop-go" economic cycle defined Argentina's macroeconomic performance for decades. The cycle worked as follows: A government would attempt to stimulate economic growth through fiscal spending; domestic prices would rise due to growth in the money supply; imports would increase, forcing the country to devalue the domestic currency to regain competitiveness and remedy a balance of payments deficit; devaluation would lead to recession and the cycle would begin anew.

Mercado argues that the impetus behind Argentina's stop-go cycle was the fact that Argentina's main exports originated in the agricultural sector. Historically, agricultural goods for export also constituted main foodstuffs (wage goods) for the country's labor force. As will be discussed in Chapter Six, when exports and wage goods coincide, a real depreciation of the peso or increase in export prices, while beneficial to agricultural exporters, depresses real wages and thus exerts inflationary pressure on nominal wages and domestic prices (Mercado 2007, 14).

Soy's emergence as Argentina's primary export commodity eliminated the export-wage good conundrum. Soy is scarcely consumed domestically and is commonly double-cropped with wheat. Soy production fueled what Mercado calls a "surprising" macroeconomic recovery. Within a year of the peso's devaluation, Argentina began its longest expansion period on record, boasting 8% annual GDP growth and low rates of inflation (Mercado 2007, 7). Concerns that cash crop production will displace staple food production in the long run are no doubt valid. Nonetheless, the Argentine experience demonstrates an important relationship between crop selection and macroeconomic stability.

Comparing Rules-Based and Flexible Monetary Regimes

Argentina's history of contrasting monetary regimes offers a second lesson concerning the relationship between monetary conditions and agricultural markets. As described by Mercado, convertibility was part of an "ambitious experiment in economic policy" that included economic openness, privatization, and deregulation of the economy. Convertibility granted the BCRA full independence from political interference and zero authority to deviate from legislated monetary policy guidelines, effectively "eliminating monetary and exchange rate policy from the policy tool box of the government" (Mercado 2007, 1). The peso's hard peg to the dollar significantly impacted the real exchange rate, posing an easily identifiable relationship between monetary policy and export competitiveness. The transition from convertibility to an expanded Central Bank mandate creates useful units for comparing central bank governance strategies.

Government Intervention in Agricultural Markets

Third, Argentina is an interesting case study due to its exceptional propensity for government intervention in the agricultural sector. Lence (2010) quantifies government discrimination against the agricultural sector using a measure he calls the nominal rate of assistance (NRA). The NRA identifies price distortions of agricultural goods according to the disparity between a commodity's nominal price and its estimated price absent government intervention. By this measure, a positive NRA indicates overall government support for the sector through subsidies, tax cuts, and other policy mechanisms. A negative rate, on the other hand, indicates an anti-agricultural discrimination against agricultural producers in favor of other sectors (primarily manufactured goods), exercised through taxes, export restrictions, and other mechanisms. Between 2000 and 2005, the world's top 20 agricultural producers, Argentina boasted the lowest rate of nominal assistance, indicating a strong anti-agricultural bias (Lence 2010, 424). Argentina's NRA has likely further declined since 2005, as export taxes have increased in response to increasing global commodity prices. How the new Central Bank mandate affects government intervention in the sector remains to be determined.

The Weight of Export Agriculture in Argentina's Economy

Finally, Argentina is a good case study because of the weight of the agricultural sector and agricultural exports in the Argentine economy. Because agricultural exports are critical to the country's macroeconomic stability, the bi-directional links between monetary policy and agricultural production are particularly strong. In this context, Argentina may offer insight into the incentives, complexities, challenges, and consequences of collective action in the agricultural sector, as well as how to channel sectoral interests in the policymaking process. The successes and shortcomings of the Mesa de Enlace demonstrate divergence and commonality of interests in the sector. It is not inconceivable that the new Central Bank charter will prove to be detrimental to some members of the Mesa de Enlace and beneficial to others. The sector's influence in matters of monetary policy, moreover, likely will vary over time, depending on the sector's strength and sources of power.

Why Soy?

Soy offers unique perspective into the relationship between agricultural interests and central bank behavior. Because of the extent to which soy output is tied to international markets, the sector uniquely demonstrates the importance of the real exchange rate to export competitiveness. Two defining characteristics intensify the soy sector's relationship with the real exchange rate in Argentina. First, soy is the quintessential export crop. Because it is not consumed domestically in Argentina, its production is almost entirely responsive to international market conditions. The global price for soy, mediated by the real exchange rate, is a critical determinant of the contraction or expansion of soy production. (Richards, 2012) Second, soy products have little value added, meaning that price alone distinguishes Argentine soy products from the soy products of Argentina's competitors.

The new Central Bank mandate operates against an economic backdrop defined by an increasing interdependence between soy production, economic growth, and macroeconomic stability. Cibils writes, "While soybean exports can be seen as a typical

‘trade and environment’ issue ... deeper questions concerning the origins of this issue are to be found in strategic macroeconomic policy decisions related to monetary and exchange rate policies, as well as fiscal policy.” Cibils notes, for example, that soybean exports are a key component of Argentina’s debt service sustainability (Cibils 2011, 59).

It is potentially problematic, then, that although Argentina is the global leader in the export of processed soy goods such as soy meal and soy oil, observers have noted a re-primarization or re-commodification of Argentina’s soy economy. Without specialized markets for value-added goods, the soy economy is vulnerable to international shifts in supply and demand. Supply volatility was evident, for example, when 2012 drought conditions contributed to an 11 million ton shortfall in projected harvest yields (Quiroga 2012). On the demand side, as Richards notes, “The vast majority of South American soybeans are destined for international consumption, a fact which separates soybeans from many other principal food export commodities of South America.” The sector’s dependence on international demand “heightens its sensitivity to the dynamics of the international marketplace” (Richards, et al., 2012, 456).

Altogether, the soy sector’s dependence on global demand, its role in the domestic economy, and its deficit of value added illustrate the potential trade-offs between short-term macroeconomic stability and long-term cash crop dependence. Soy revenue and foreign exchange protects Argentina’s balance of payments, fostering a stable macroeconomic environment that can protect against inflation. On the other hand, the spread of soy production may come at the expense of other crops and livestock. Whether and how Argentina is able to manage these dilemmas will be relevant for any country pursuing a cash-crop based model for economic growth.

One final consideration in this examination of the soy sector is the impact of export taxes as a fiscal and monetary tool. The government in Argentina taxes exports of soy and other crops heavily. Export tariffs comprise a significant share of total government revenue and perform a price-stabilizing function for crops consumed domestically. Export tariffs also significantly decrease profit margins and thus have a direct negative impact on domestic production.

Argentina is well known for its preference for export tariffs to generate revenue. For this reason, the country is a logical case study to examine the impact of export tariffs, not only on domestic agricultural output, but also on global food price stability. Particularly when implemented in a country that is a large producer on the world market, export restrictions can put significant upward pressure on global food prices by diminishing global supply. The resulting increase in price only creates further incentive for other exporting countries to follow suit and also impose export restrictions. In this manner, export taxes are apt to create supply-side feedback loops that can accumulate through the global commodities market. This ripple effect compounds supply shortages where they exist, often at the peril of countries that are dependent on imports for their food supply. In the wake of the global spike in food prices between 2006 and 2008, for example, several countries imposed export restrictions on staple food crops to alleviate the domestic impact of rising prices. The net effect of these actions pushed global prices higher (Horton 2009, 36; FAO, et al., 2012, 24).

Outline of the Paper

The paper is organized as follows:

Chapter Two explores the features of agricultural production in Argentina and the development of the agricultural export sector. The chapter offers insights into regional production patterns, producer profiles, and various factors of production. It highlights the growing influence of soy, not only in the agricultural export market but also throughout Argentina's economy as a whole, and what the growth of the soy sector has meant for the production of traditional agricultural products, including beef, wheat, and corn. The chapter identifies conditions that favor or hinder competitiveness of Argentine agricultural exports.

Chapter Three takes a closer look at the political economy of export agriculture in Argentina. Agriculture, and particularly soy, is a prime source of employment, economic growth, fiscal revenue, and foreign reserves. How the sector is governed has a significant

impact on the distribution of resources between producers, consumers, the state, and other economic sectors. This chapter specifically examines the distributive impact of real currency values, identifying various causes of real exchange rate appreciation and depreciation and detailing how real currency values affect the prices of internationally traded goods. The chapter highlights compensatory strategies for mediating conflicts surrounding the real exchange rate, with a specific focus on export taxes.

Chapter Four provides an introduction to Central Bank governance and policymaking in Argentina. The chapter gives a historical profile of the BCRA dating back to the beginning of convertibility in 1991. This history helps explain the current evolution of the BCRA's mandate. The chapter compares the rules-based monetary framework of convertibility with the increased monetary flexibility of the 2012 reform to the Central Bank's charter, and offers a set of heuristics for assessing how the new charter may or may not affect the agricultural sector.

Chapter Five details the policymaking process in Argentina in order to better understand channels for influencing monetary policy. The chapter examines Argentina's strong federal executive branch, high level of provincialism, weak legislative branch, and weak political institutions as potential indicators of how political forces may directly or indirectly affect monetary policy. Specific attention is also paid to informal channels for influencing policy, including economic and social protest and framing issues through public discourse.

Chapter Six looks at interest group activity in Argentina and the strategies through which actors in the agricultural sector articulate and advance their interests. The chapter gives a brief history of agricultural producer associations in Argentina and the forces that compelled the formation of the Mesa de Enlace. It identifies the challenges that face a broader sectoral coalition, such as sectoral competition for influence in the policymaking process, while acknowledging the role of soy in removing inter-sectoral competition over the price of wage-goods.

The Mesa de Enlace is used here as a conduit to determine the agricultural sector's interest vis-à-vis a broader Central Bank mandate. Toward this end, I have

examined public communications through news media outlets and public statements with two questions in mind. First, what was the Mesa de Enlace's position concerning the removal of Martín Redrado as the head of the Central Bank in 2010? Second, has the Mesa de Enlace adopted a formal position with regard to reforms to the Central Bank charter in 2012?

Finally, I offer brief concluding remarks and a brief discussion of the policy implications of an expanded Central Bank mandate for agricultural interest articulation.

Chapter 2: Features of Production, Competitiveness, and Government Intervention in Argentine Agriculture

Introduction

Argentina is richly endowed with the geography, natural resources, and climate to sustain a significant comparative advantage in global agricultural markets. Argentina's southern location means that it enjoys a seasonal complementarity with its biggest competitor, the United States, and the country's Pampa region boasts some of the most fertile soil in the world. The competitiveness of Argentine soy, however, extends beyond agro-ecological conditions. Soy is not consumed domestically, meaning that almost all production is oriented toward export markets. Pampean farms are generally large and capital intensive and thus can take advantage of economies of scale. Meanwhile soy production has expanded beyond the Pampa into formerly marginalized regions with the help of modern agricultural inputs and production methods, including glyphosate herbicide, *RoundUp Ready* genetically-modified seed, and no-tillage sowing. Under these conditions, soy is leading a boom in crop agriculture that has significantly altered traditional production patterns in Argentina.

This chapter gives an overview of agricultural production in Argentina and the “soyafication” of Argentine agriculture. Before delving into the real exchange rate as a determinant of international competitiveness in Chapter Three, this paper identifies other factors driving producers' ability to compete in international markets in Chapter Two. The factors discussed in this chapter determine domestic prices and resulting production costs – an integral component of the real exchange rate. Natural resources, technology, and use of inputs favor Argentine competitiveness. But opportunity exists to drive down costs and increase competitiveness by improving the country's infrastructure and closing the “transport-cost” gap between Argentina and the United States and Brazil.

Features of Argentine Agriculture

Geographically, Argentina covers 274 million hectares (ha) of total land area. The crop frontier continues to expand. To get a general idea of agriculture's territorial reach, consider the following statistics: in 2004 approximately 142 million ha were dedicated to permanent pasture in Argentina; 34 million ha were planted to arable crops; and one million ha were planted to permanent crops (FAO 2004, 1). The country's geophysical and demographic conditions favor large-scale agricultural production. The country is scarcely populated and richly endowed with natural resources, arable soil, temperate climate, adequate rainfall, and easy access to ports (Lence 2010, 418). Argentina also enjoys a long growing season, which spans nine months from September thru May. An extended frost-free period provides an ideal environment for double-cropping winter wheat with soybeans (Schnepf 2001, 10).

Illustrating Argentina's agricultural prowess, Lence notes that in 2006, Argentina accounted for only .59% of the world's population but controlled 2.1% of the world's total land area, 2.23% of the world's arable land, and 2.96% of the world's area with permanent meadows and pastures. Between 2005 and 2007, Argentina produced 9.4% of world agricultural output and accounted for 2.9% of world agricultural trade (Lence 2010, 409).

Figure 2.1 and Figure 2.2 break down total harvested area and total agricultural output, respectively, of Argentina four major crops (soybean, maize, wheat, and sunflower) over time:

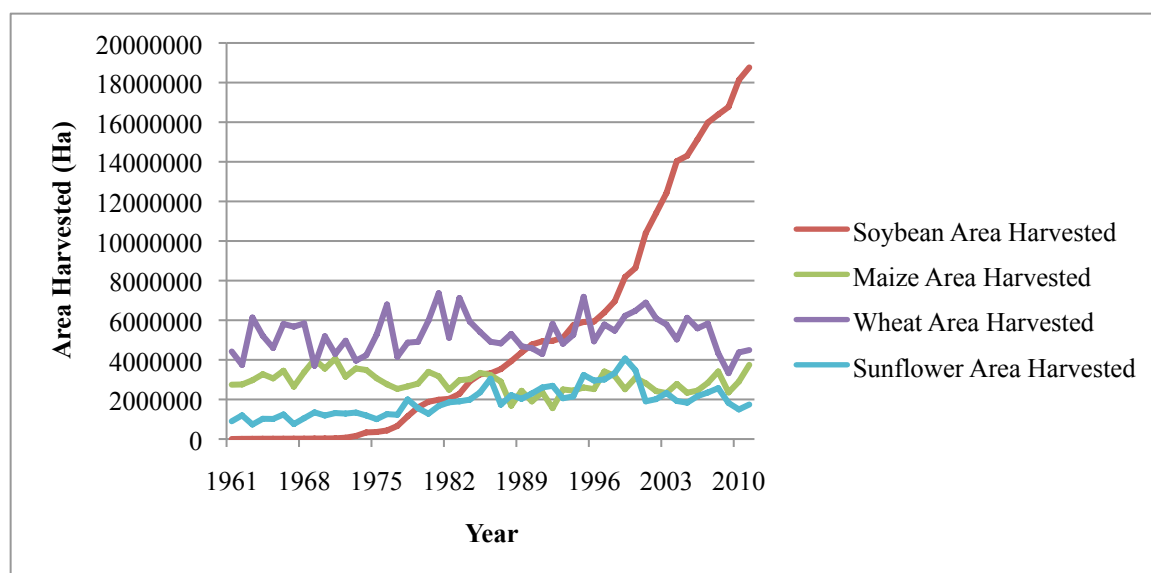


Figure 2.1: Total area harvested to soybean, wheat, maize, and sunflower, 1961-2011 (FAOSTAT 2013).

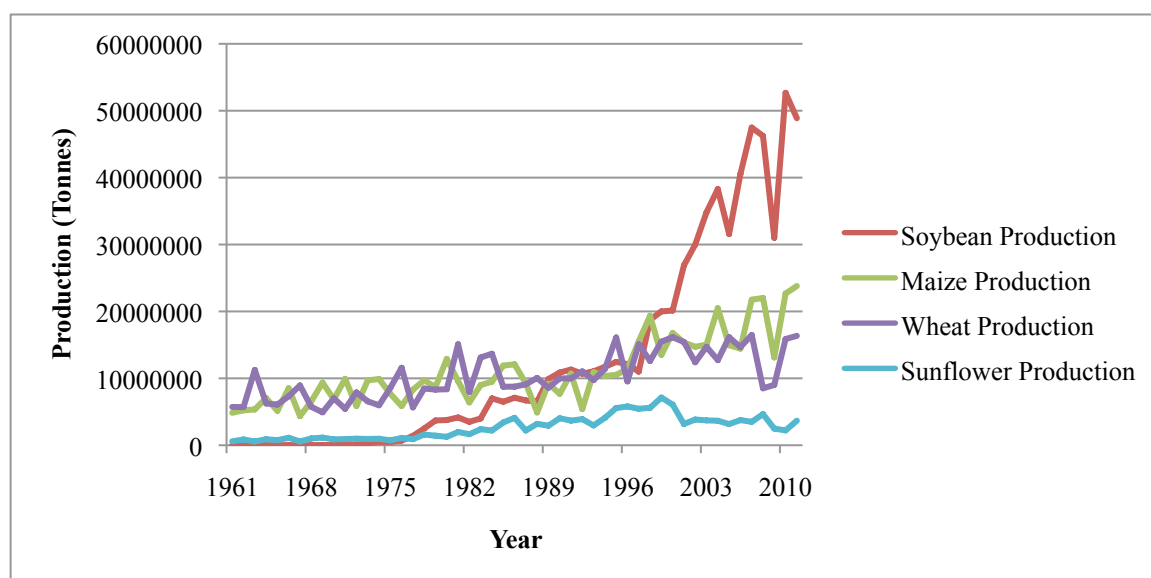


Figure 2.2: Total production of soybean, wheat, maize, and sunflower, 1961-2011 (FAOSTAT 2013).

The Food and Agriculture Organization of the United Nations (FAO) divides Argentina into three agricultural regions: a humid region covering approximately 68

million ha, or 25% of total land area, and encompassing the fertile agricultural region known as the Pampa; a semi-arid region covering 48 million ha, or 15% of total land area; and an arid region covering 170 million ha, or 60% of total land area. This final region constitutes the Patagonia region south of Rio Colorado and contains little agricultural activity (FAO 2004, 1). Figure 2.3 details Argentina's agro-ecological regions as they correspond to provincial boundaries:

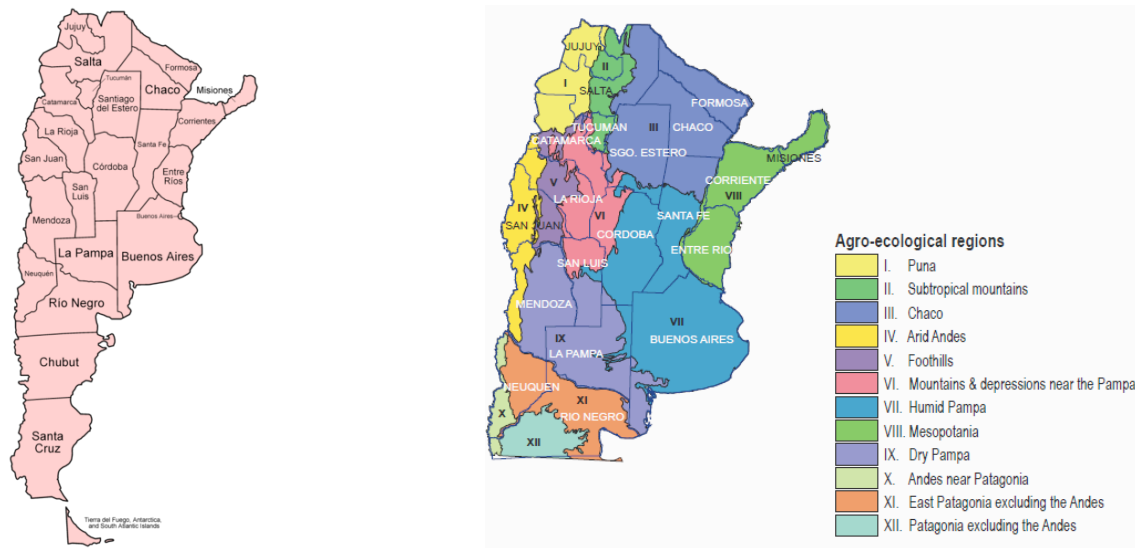


Figure 2.3: Provincial map (Golbez 2005) and agro-ecological map (FAO 2004) of Argentina.

Regional Differences in Agricultural Production

Argentina's agro-ecological variance dictates agricultural production patterns. In fact, based on regional variance in conditions, Lence classifies two categories of agricultural production: output from the Pampa region and output from the non-Pampa region (what he calls the "regional economies"). As demonstrated in Figure 1.3, the Pampa comprises the center and east of the country. It includes the most important agricultural provinces in Argentina, including Buenos Aires, Córdoba, and Santa Fe (Lence 2010, 415). Schnepf, et al., compare the Pampa's humid, warm temperate climate

to the Southeast U.S. (Schnepf 2001, 6). Annual rainfall varies between 800 mm in the west and 1000 mm in the east (FAO 2004, 1). As a result, the provinces boast some of the most fertile soils in the world (Brooks and Lucatelli 2004, 159). The region produces the majority of the country's grains, oilseeds, cattle, and milk (Lence 2010, 415). The main crops are soybean, wheat, maize and sunflower; secondary crops include sorghum, barley, groundnuts and flax. In contrast to the regional economies, where products that come from perennial plants are unresponsive to short-run demand shifts, high soil fertility in the Pampa allows farmers to shift quickly between wheat and feed crops and oilseeds, depending on profit expectations (Sturzenegger 1991, 19).

Outside the Pampa in the regional economies, the FAO highlights productive contributions from the northern region and the irrigated valleys (FAO 2004, 1). The northern region consists of the northeastern provinces of Salta, Jujuy, Tucumán, Santiago de Estero, and Catamarca, and the northwestern provinces of Corrientes, Chaco, Misiones, and Formosa. Climate in these regions is semi-tropical and warmer than in the Pampa (Schnepf 2001, 6). Among other things, these provinces are the main producers of industrial crops, such as cotton and wool. The irrigated valleys, which consist of the western provinces of La Rioja, San Juan, Mendoza, Rio Negro, and Neuquén, are important for the production of higher value crops such as fruits and horticultural crops. Mendoza, for example, is Argentina's primary wine-producing region (FAO 2004, 2-3). Together, the regional economies produce a range of agricultural goods, including sheep, grapes and other fruits, sugar, citrus, tobacco leaf, cotton, tea, and mate (Lence 2010, 415).

Cattle production, meanwhile, is predominantly located in the central eastern provinces of Buenos Aires, Santa Fe, Córdoba, La Pampa, and Entre Ríos, and the northern provinces. Together these regions account for 95% of Argentina's beef cattle population. In the past decade there has been a gradual displacement of cattle from the Pampa to the north, largely in response to expanded soy production (Guevara and Grünwaldt 2012, 117, 124).

Patterns of Production in the Pampa and Regional Economies

Beyond crop diversity, agricultural production in the Pampa and agricultural production in the regional economies are significantly different. For purposes of this paper, no causal relationships are drawn to explain these differences, but it is clear that these distinguishing characteristics affect how producers in each zone allocate resources and respond to incentives. It should be noted, as Sturzenegger and Salazni do, that “[the] traditional split between two kinds of productions is rapidly losing ground, mainly on account of the rapid expansion of soybean crops in the northwest and northeast regions” (Sturzenegger and Salazni 2007, 6). A few distinctions in regional patterns of production nonetheless merit some attention.

First, each region relies on different factors of production. Pampean production is “more intensive in the use of machinery and management, and more extensive in the use of land and labor” than that in the regional economies, although land usage in the Pampa is becoming increasingly intensive as the crop frontier expands and replaces permanent pasture and producers adopt double-cropping. Regional production, by contrast, is “less intensive in management and capital (with the exception of irrigation development) and more land- and especially labor-intensive” (Lence 2010, 418, 430). Sturzenegger and Salazni note that in regional production, employment of labor per unit of land (hectare) and per unit of value added is several times that of the Pampa (Sturzenegger and Salazni 2007, 6)

Second, there is a significant disparity in average farm size between the Pampa and regional economies. Farms in the Pampa are significantly larger than farms elsewhere. The Pampa’s larger commercial farms enjoy distinct advantages over small-scale subsistence or semi-subsistence farms elsewhere. Large farms are more capital intensive, enjoy economies of scale, can more easily access credit, and are better able to coordinate with downstream producers (Brooks and Lucatelli 2004, 154). Sturzenegger and Salazni argue that a large number of regional farms outside the Pampa operate at sub-optimal scale, “well below that needed for adequate technological and economic

development” (Sturzenegger and Salazni 2007, 6). On the whole, Argentina has experienced an “exodus of less productive (small-scale) farmers from the sector as a consequence of economic development.” Brooks and Lucatelli categorize 7.2% of Argentine farms as large, yet these farms hold upwards of 75% of total farmland (Brooks and Lucatelli 2004, 153).

Third, rural poverty is concentrated in regional zones. Sturzenegger and Salazni estimate that 200,000 indigenous families live in poverty in the northern regions, indicating that “rural poverty alleviation in Argentina relies on the future performance of regional agricultural economies” (Sturzenegger and Salazni 2007, 6-7).

Together, these geographical differences help guide the orientation of Argentina’s agricultural markets. Pampean production is predominantly export-oriented; regional production tends to be consumed domestically. Pampean products are accordingly more responsive to international prices and market signals and less likely to receive government protection (Lence 2010, 418). Since the late 1980s, the Pampa has experienced progressive concentration of land, reduction in the number of producers, and an increase in average farm size (FAO 2004, 8).

Producer Profiles

Despite the prevalence of agriculture throughout the Argentine provinces, it is a misnomer to refer to the Argentine population as agrarian. In 2001, the FAO classified only 4.4 million people as rural and 3.7 million people as agricultural, of a total national population of 37.5 million. The FAO is careful to distinguish agricultural producers from, say, farmers who cultivate the land, instead recognizing agricultural “producers” as the first to market the agricultural product. In the Pampa, 28% of producers live on the farm, but this percentage is as low as 10% in some areas. Approximately 15% of producers live in cities with more than 50,000 inhabitants. This number is higher in the southeast area of Buenos Aires, where 38% of producers live in cities half that size (FAO 2004, 6-7). Calvo, et al., broadly define “producers” as those who make up the supply, including in this group land owners, tenants, contractors, pool producers, and agricultural

investments common funds. These actors sell to grain elevators, first grade cooperatives, livestock producers, exchange dealers, industries and exporters with vertical integration strategies (Calvo, et al., 2011, 380).

The Soy Value Chain

Growth in soy production and concerns of crop displacement notwithstanding, Argentina produces a wide array of agricultural products for export. In 2001 Argentina was the world's 6th largest producer and 2nd largest exporter of corn and the world's 5th largest exporter of wheat. As with soy, Argentina's land resources promise significant growth potential for these and other crops, while Argentina's seasonal production cycle and limited domestic demand for crops such as corn lend Argentine exports strong seasonal export competitiveness (Schnepf, et al., 2001, 28-30). Despite a recent decline in livestock production, Argentina is also the world's fourth largest producer of beef. The country is responsible for 4.8% of the world's beef output, though high domestic beef consumption and restrictions on beef exports mean that Argentina ranks only 7th among beef exporters (Lence 2010, 410).

Nonetheless, Argentina is most notable for its soy production. Argentina is the third-largest exporter of soybeans, behind the United States and Brazil, and the world's leading exporter of soybean products, such as soy oil and soy meal. These soy-based processed products dominate Argentina's processed food industry as well (Lence 2010, 414). According to Brooks and Lucatelli, 85% of total soy production is processed into soybean-cake and soybean oil. Approximately 95% of these low-processed products are then exported.

As soy production has grown in size, the soy value chain has grown in complexity. Not only has the number of buyers and sellers increased, but complementary industries have sprouted to support the soy sector's rapid expansion. This section traces the process of "soyafication" of the Argentine economy and briefly outlines the reach of the soy value chain.

“Soyafication” and the Expansion of the Agricultural Frontier

Soy production is most prominent in what Nassar and Antoniazzi call the “Nucleo Zone”, comprising the provinces of Córdoba, Buenos Aires, Santa Fe, Entre Ríos, and La Pampa. These provinces are responsible for 90% of the area planted to soy (Nassar and Antoniazzi 2011, 4). At the same time, high international prices for soy, appreciation of land values in the Pampa, and technological advances have caused a rapid expansion of agricultural cropland into the regional economies, including into areas previously considered unfeasible for agricultural production, partly at the expense of other crop and livestock production. Cap and Malach refer to this expansion as the “soyafication” of the Argentine economy, which they define as a “continuous process of growth of both production and domestic processing of soybeans, at the expense of other agricultural activities” (Cap and Malach 2012, 4-5)

Conte, et al., track this expansion process. They find that the territorial spread of soybean production has its origins in the north, specifically in the traditional maize-growing region of Misiones province, the eastern sectors of Tucumán province, and locations in Salta and Chaco provinces. In the early 1980s, soybean cultivation moved into non-traditional areas for agricultural production in Misiones, Chaco, Formosa, and Corrientes provinces. From there, production spread into the marginal lands of Santiago del Estero as cotton production in that province declined, land values fell, and producers adopted no-tillage sowing and genetically modified soybeans (Conte, et al., 5-6).

Production in the Pampa has propelled the growth of soy production in the regional economies. This is because the profitability of soy in the Pampa drives up the price of land, encouraging farmers to move in search of cheaper land elsewhere. The introduction of transgenic *RoundUp Ready* soybeans into the Argentine market in 1997 and the rapid adoption of zero-tillage sowing made soy easily adaptable to lower quality soils outside the Pampa (Conte, et al., 9-10). In Figure 2.4, Cap and Malach use the growth pattern of land harvested to soy (shown in Figure 2.1) to demonstrate a persuasive

correlation between the commercial release of glyphosate-tolerant genetically modified seed varieties and the expansion of soy production in Argentina. As calculated by Cap and Malach, the rate of territorial expansion increases three-fold from 1996/1997 to 2011/2012, relative to the rate of expansion from 1970/1971 to 1995/1996 (Cap and Malach 2012, 4):

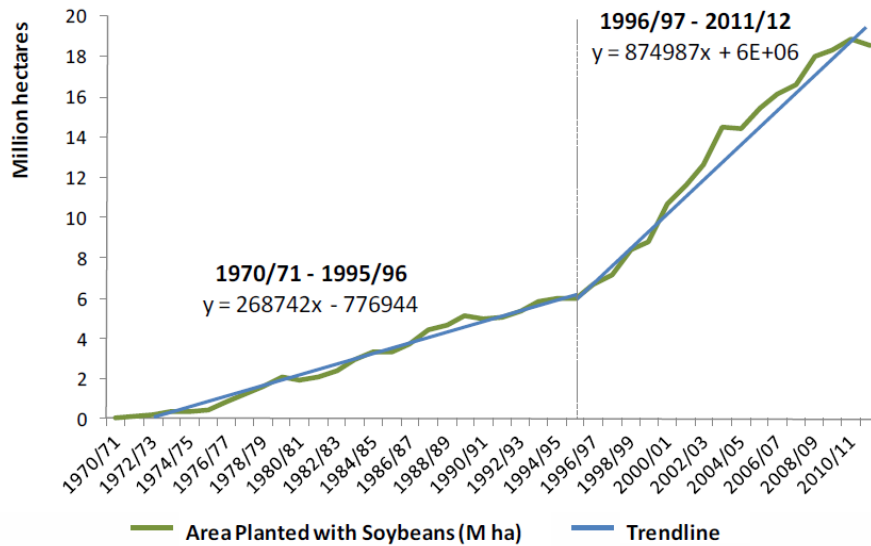


Figure 2.4: Evolution of the area planted with soybeans, 1970/1971-2011/2012, and rates of expansion pre- and post-1996/1997 (Cap and Malach 2012, 4).

In Figure 2.5, Argentina's National Scientific and Technical Research Council highlights the speed and intensity with which this process has taken place, a phenomenon which Conte, et al., worry is driving a soy-based monoculture (Conte, et al., 2007). Even now, Argentina's still has great potential to expand its agricultural frontier. Much of Argentina's agricultural land remains in permanent pasture, meaning there is ample opportunity to increase agricultural production by converting permanent pasture into arable cropland (Brooks and Lucatelli, 158). Production decisions will, of course, depend largely on agricultural prices and land values.

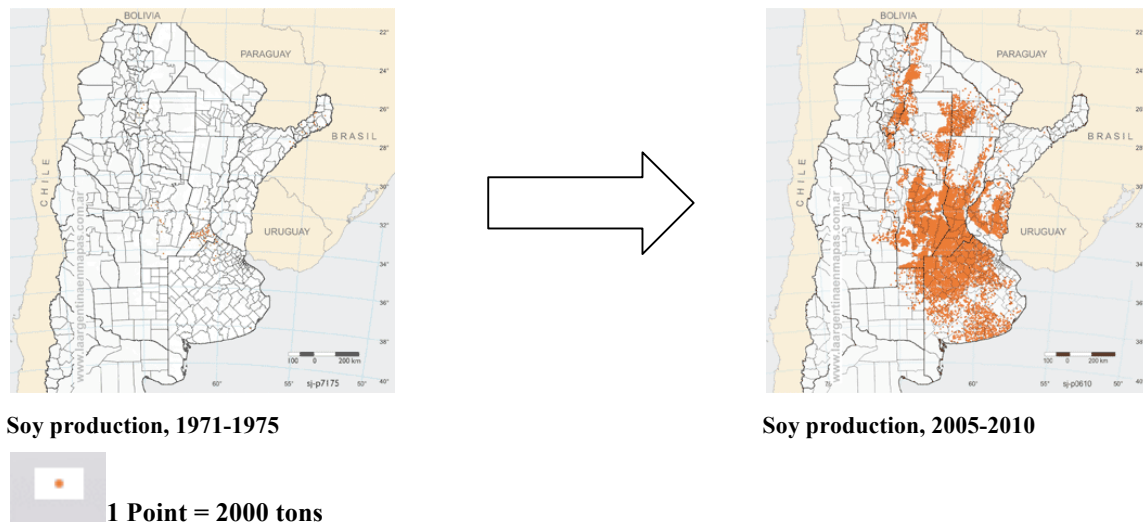


Figure 2.5: Comparison of soy production by region, 1971-1975 and 2005-2010 (Consejo Nacional de Investigaciones Científicas y Técnicas 2012).

It is important to note that as soy expands to marginal lands and must grow in diverse agro-ecological conditions, some regions may be more vulnerable to weather and external economic conditions than others. Conte, et al., write:

In the Pampean region, where the initial ecosystems have been deeply transformed for so long now, in which there also mostly exists a capacity of finding new technological solutions for solving the problems resulting from the ecological changes, the unexpected impact may reverse without causing severe damages; but the most fragile regions of the northeast and northwest with scarce agricultural tradition and where soybean single cropping is also accompanied by weather variability which may turn adverse at any time, the risk situation is much higher. Conversely, the concentration of agriculture and livestock raising mostly into agriculture, and within it, into a single crop increases the vulnerability of the economy, not only of farmers but also of the nation as a whole. (2007,10)

Transition from Pasture to Cropland

One agricultural subsector greatly impacted by soy's territorial expansion is livestock. Argentina has experienced a dramatic shift in the size and location of cattle production. In Argentina's more productive regions, livestock must compete for grazing

land with field crops. Elsewhere, livestock and crop cultivation are highly complementary, as farmers can rotate crops with sown pastures to maintain soil fertility. As a result, Schnepf, et al., argue, the tradeoff between pasture and field crop cultivation is responsive to market conditions (Schnepf, et al., 2001, 32).

Until the mid-1990s, crop area in the regional economies remained stable at approximately four million hectares. But because crop production value has increased so much faster than the value of livestock output, crop area outside the Pampa has since doubled in size (Lence 2010, 414, 430). As demonstrated in the Figure 2.6 below, compiled by Guevara and Grünwaldt, Argentina's cattle stock steadily increased between 2001 and 2007, but has sharply declined since then. According to Guevara and Grünwaldt, there is precedence for variance in cattle population size dating back to the 1970s. The most recent contraction in the livestock sector is likely the result of a combination of policies controlling domestic beef prices and restricting beef exports. Ultimately, though, soybean production is rapidly displacing cattle production in the Pampa (Guevara and Grünwaldt 2012, 118).

Category	Year									
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Cows	21.9	20.2	22.9	23.1	23.5	24.2	24.4	23.9	22.2	20.5
Calves	10.8	10.7	14.7	14.6	14.5	15.3	15.4	15.4	14.1	12.6
Heifers	7.0	7.2	8.0	8.2	7.9	8.0	8.3	7.9	7.7	6.9
Steers	7.8	8.9	10.5	11.1	11.3	10.9	10.8	10.7	10.6	9.1
Bulls	1.2	1.2	1.2	1.3	1.3	1.3	1.3	1.3	1.2	1.2
Without identification	0.1	0.3	--	--	--	--	--	--	--	--
Total stock	48.8	48.5	57.3	58.3	58.5	59.7	60.2	59.2	55.8	50.3

Figure 2.6: Evolution of cattle stock (million head), 2001-2010.

Complementary Services, Infrastructure Development, and Market Integration for Processed Soy Byproducts

Soybean producers in Argentina interact with an extensive network of actors who provide a variety of services, beginning with production. Contractors, for example, perform many on-farm operations, including planting, spraying, and harvesting (Soybean and Corn Advisor 2013). Off the farm, numerous actors fill the agricultural value chain. Among them are providers of financing and agricultural inputs, including national and international firms; intermediaries who manage storage, handling, drying, commercialization, and transportation; processors of primary production, who are dispersed throughout the country and include crushing mills for processing soybean and sunflower grains; and commercial distributors (Sturzenegger and Salazni 2007, 8-9).

Soybean producers also rely upon developed infrastructure for the processing and marketing of soy byproducts. Rossi refers to a “powerful ‘soy cluster’” that promotes interdependence between all actors in the chain. Annual soybean crushing capacity in Argentina is 48 million tons. Producers can take advantage of propitious location of processing plants and storage facilities, the majority of which are located within 300 km of the main soy zone on the River Paraná coast in Santa Fe, Córdoba, and Buenos Aires provinces. Eight are maritime and are located in Buenos Aires province. As of 2008, Santa Fe alone processed 87% of soybean grain. More than \$1.5 billion USD had been invested in an agro-industrial complex in Rosario, the province’s largest city (Rossi 2008, 62-63). Also, the production processes of soy oil and soy meal are technologically associated and produced in the same industrial plants (Calvo, et al., 2011, 371).

Soybean processing in Argentina is concentrated in six companies: Bunge, Cargill, Vicentín, Molinos Río de la Plata, Dreyfus, and Aceitera General Deheza. These companies control the vast majority of Argentina’s total processing capacity. They have access to their own modern and efficient port infrastructure (40 port terminals have the capacity to deliver grain, oil and protein meal in bulk) and “an extended supply net

spread throughout the entire country” (Calvo, et al., 2011, 374, 383). In an analysis of state-capital relations in the biotechnology sector, Newell emphasizes the political power of biotechnology firms. The expansion of biotechnology in Argentina draws particular attention to the role of foreign and multinational firms in Argentina’s agricultural sector. “As owners of the technology and controllers of distribution and supply chains,” he writes, “firms are cast as agenda-setters, private regulators, and policy enforcers in biotechnology politics.” They are also innovators. Citing Burachik and Traynor, Newell notes that 90% of applications for field trials have come from overseas companies (Newell 2009, 30-31).

Over time, the soy supply chain has achieved a certain level of market integration. López, et al., provide three figures to illustrate how market integration has altered the supply chain. Figure 2.7 shows the soybean marketing as it operated through the 1980’s. Since then, two distinct types of integration have occurred. Through downstream integration (Figure 2.8), exporting firms purchased their own port facilities. Through upstream integration (Figure 2.9), exporting firms developed capacity to store grains and byproducts so that they could carry out activities previously performed by middlemen and cooperatives. With the help of greater storage capacity, integration has brought exporters closer to producers, created contingencies for shortages in the primary market, and have generated a degree of independence for exporters (López, et al., 2008, 4-5).

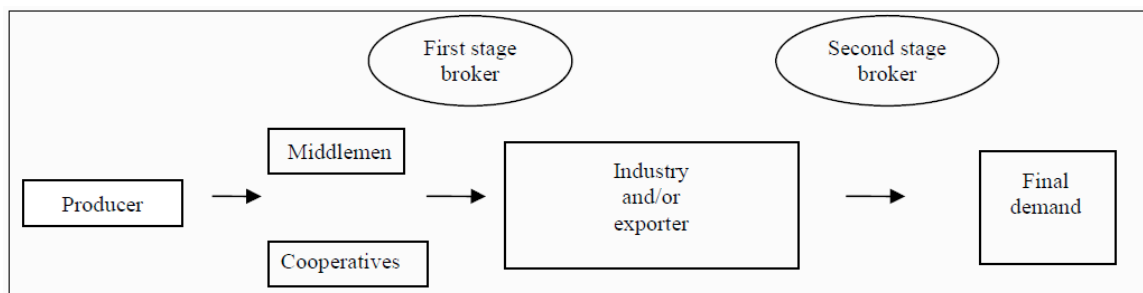


Figure 2.7: Soybean marketing structure in Argentina through the 1980s (López, et al., 2008, 4).

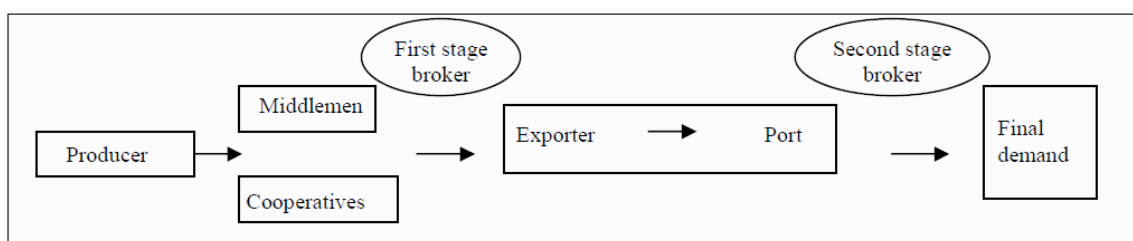


Figure 2.8: Downstream integration in soybean marketing in Argentina (López, et al., 2008, 5).

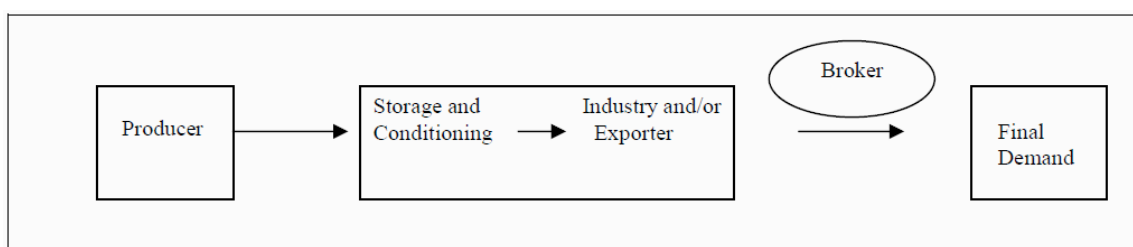


Figure 2.9: Upstream integration in soybean marketing in Argentina (López, et al., 2008, 5).

The chain for processed goods has gained marked efficiency over the past two decades. Argentina is the world's largest exporter of soy meal and soy oil. According to Soybean and Corn Advisor, 80% or more of Argentina's soybeans are processed (Soybean and Corn Advisor 2013). Relative to soybeans and soy meal, soybean oil has increased its value over time due to growing demand for biodiesel in Europe. In the mid-2000s, soy oil also began contributing to rising prices for soybeans. But it is the soymeal market that has instigated the grain's production expansion (demonstrating the meal potential from soybeans, Nassar, et al., note that it is possible to extract 76% of soy meal and 19% of oil from soy grains) (Nassar, et al., 2011, 7). Figure 2.11 supports this assertion, demonstrating that soy meal exports increase and decrease as soybean production increases and decreases.

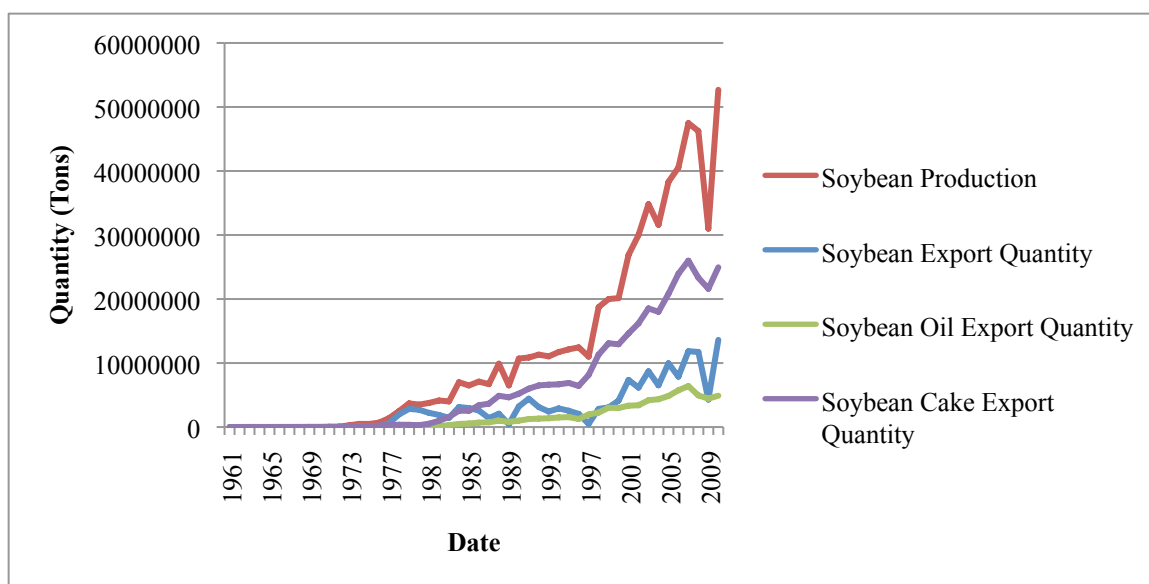


Figure 2.10: Export quantities for soybean byproducts, 1961-2010 (FAOSTAT).

As Nassar, et al., also note, “Producers work with a narrow profit margin, depending on the farm’s production costs, transportation costs, and the price of grains” (Nassar, et al., 2011, 7). Figure 2.2 above demonstrates that there is still much annual variance in annual soybean production. This variance is partly a function of climate and largely the result of political economic factors such as the real exchange rate, export taxes, and producer reactions to what are perceived as confiscatory policies. This circumstance begs the question, what is the source of Argentina’s competitiveness in global agricultural markets, and in the market for processed soy goods in particular?

Primary agricultural products, after all, are relatively homogenous. No individual producer exercises market power. Competitiveness depends primarily on costs, given that primary goods do not exhibit distinguishing characteristics (Brooks and Lucatelli 2004, 148). Government tax breaks encourage the export of processed soy byproducts over primary goods, but the soy complex has nonetheless been burdened by unstable macroeconomic conditions, trade restrictions on inputs and exports, and government policies favoring industrial development and cheap domestic food prices (Schnepf, et al., 2001, 15). The following section details several factors that help determine Argentina’s

comparative advantages, and disadvantages, for soy and other agricultural goods in international markets.

Defining Agricultural Competitiveness: Explaining the Agricultural Boom in Argentina

What constitutes an advantage or disadvantage is not always clear cut. For example, Argentina's geographical advantage is a double-edged sword. Although Argentina's location means that production of export crops is counter-seasonal to the United States, it also means a formidable distance between Argentina and its biggest international markets (e.g. the European Union). Proximity to consumer markets imposes significant transport costs on Argentine producers, which act as a "systemic form of 'natural protection'" (Brooks and Lucatelli 2004, 153).

In other words, comparative advantage is dynamic. Competitiveness shifts constantly in response to climatic conditions, input prices, technological advances, and, of course, the policy environment. Policies that encourage producers to expand production into new agricultural frontiers may increase access to natural resources. On the other hand, policies that prioritize urban development may simultaneously diminish the natural resource stock (Brooks and Lucatelli 2004, 158). Similarly, conditions that favor short-term comparative advantage may adversely affect long-term comparative advantage. For example, farmland in the regional economies is cheap, which allows for lower fixed costs for farmers. But expansion of soy production onto marginal lands with poor soil can cause further soil degradation, increase dependence on a single cash crop, and increase costs in the long term.

When all is said and done, monetary policy is only one of many determinants of competitiveness in global agricultural markets. The market and policy conditions outlined below hopefully provide an operative context for the competitive environment in which the new Central Bank mandate has taken effect. Agricultural market infrastructure, technological modernization, and strategies for creating value added are explored here. These factors shape production costs at home, and thus determine

competitiveness abroad. The economic policy environment and real exchange rate are the subject of Chapter Three.

Technological Modernization

As previously stated, in primary commodities markets in which goods have little value added, cost is the primary determinant of comparative advantage. In Argentina's agricultural sector, technological modernization has been a key driver of cost reduction. Trade liberalization in the 1990s greatly reduced the costs of agricultural inputs imported from abroad, including more efficient machinery and higher-quality fertilizers and agrochemicals (Lence, 428). The biggest technological game changer has been the widespread adoption of genetically modified organisms (GMOs), namely glyphosate herbicide and glyphosate-resistant soybeans.

Introduced in 1996, glyphosate has many cost-reducing qualities. It preserves soil moisture, saves planting time, and helps with weed control. Glyphosate-resistant soybeans were the first transgenic crop commercially released in Argentina. These new soybeans diffused rapidly, reaching close to 100% adoption by 2004. The same was true of genetically modified seed for other crops. The adoption rate of genetically modified corn, for example, stabilized at 70% in 2003 (Lence, 428, 430). Unlike in other countries, Argentine producers do not pay technology fees for genetically modified material and farmers are permitted to save seeds from one year to the next (Schnepf, et al., 25).

High yield seed varieties are also helping Argentine producers increase their yields. Relative to their foreign competitors, Argentine producers have historically produced at lower yields. This may be due to extensive farming systems, double cropping, and a technology gap (Brooks and Lucatelli 2004, 163-164). But the gap is closing. While Schnepf, et al., attribute 1990s growth in the soy sector almost entirely to continued area expansion (Schnepf, et al., 2001, 22), Lence notes that since the early 1990s, growth in crop production has outpaced the increase in land utilization. This indicates positive trends in the yields of all major crops (even the productivity of the

cattle stock has improved, despite substitution of crops for pastures and relocation of cattle to more marginal land) (Lence 2010, 435-436).

Contrary to the expectations of some, commercialization of transgenic soy has been relatively seamless. Aided largely by growth in Chinese demand, Argentina has successfully sold its transgenic products on the international market with few problems (Rossi 2008, 62). In fact, Newell notes that Argentina embraced biotechnology precisely because of its export potential and has predicated its export model on the use of genetically-modified seeds. Argentina is the world's second largest producer and exporter of genetically modified crops. Currently, approximately 18 million ha are under genetically modified cultivation. Seven genetically modified crops have been approved for commercialization, including glyphosate-resistant soybean and herbicide and insect-resistant varieties of maize and cotton. As early as 2001, genetically modified soy comprised 90% of Argentina's 12 million hectares planted to soy. Because genetically modified production is predominantly for export, Argentina has largely avoided domestic controversy surrounding human consumption of GMOs (Newell 2009, 28, 31-32)

A second innovation, linked to both the modernization of machinery and the diffusion of glyphosate-resistant soybeans, is zero-tillage technology. Zero-tillage cultivation, most prevalent in soybean production, has expanded agricultural production in a number of ways. It reduces production costs by eliminating the need to till the soil and perform other work associated with conventional crop production; facilitates planting in marginal areas; and reduces land degradation, encouraging the conversion of land from crop-pasture rotations to permanent agriculture. Most importantly, when combined with glyphosate-tolerant seed, zero-tillage shortens the required time between the wheat harvest and soybean planting, allowing for easy double-cropping. Citing statistics from SAGPyA, Lence estimates that in 2007, 75% of first-crop soybean area and 83% of second-crop area were planted using zero-tillage technology (Lence 2010, 429-430). Anywhere from 15% to 25% of soybeans are double-cropped after wheat or barley (Soybean and Corn Advisor, website).

Finally, Argentina has adopted a number of organizational innovations that have also increased production. Principal among these are planting pools, feed lots, and silo bags. Planting pools are producer arrangements that facilitate production and commercialization through collective arrangements for inputs, labor, and financing. Pools assist with technology development and risk diversification. Through planting pools, producers may also collectively purchase or rent farmland in order to increase economies of scale and spread risk. (Lence, 432) The FAO estimates that in 2001 half of all producers planted on rented land, and rented land amounted to approximately 53% of total agricultural land. The FAO notes a growing trend toward the purchase of land for the purpose of renting, which “reflects the attraction of investment in land due to lower debts in agriculture, the absence of alternative investment opportunities and the low cost of capital” (FAO 2004, 6).

Feedlots, on the other hand, are production arrangements that allow producers to raise cattle on less land. Previously, farmers in the Pampa rotated production between agriculture and livestock breeding. The growing prevalence of feedlots has inspired the relocation of cattle from the Pampas, where land is best suited for crops, to the non-Pampean regions (Lence 2010, 433).

Finally, silo bags are being widely adopted as a means of on-farm storage. Silo bags allow producers to hold on to grain for longer periods of time, avoiding high freight costs during the harvest period.

Key Infrastructure for Agricultural Markets

A second important determinant of competitiveness is the efficiency of market infrastructure. How cost-effectively producers can get their goods from farm to market is a critical consideration for both producers and policymakers. Market infrastructure has undergone significant development in Argentina since the 1990s, largely due to President Carlos Menem’s efforts to privatize and deregulate market infrastructure, eliminate distortions in agricultural markets, and stabilize Argentina’s macroeconomic environment.

Argentina has a long coastline and major seaports, providing outlets to international markets. Still, producers are far from their principal markets and must cope with underdeveloped internal logistics systems. Transportation and marketing costs for agricultural exports are higher for Argentina than for, say, the United States. Schnepf, et al., describe underdeveloped barge and railroad transportation systems in which multiple-gauge railroad tracks force costly transshipment stops and producers often rely heavily on trucks, which must traverse unpaved highways (Schnepf, et al., 2001, et al., 13).

At the same time, Argentina has insufficient storage capacity, both on- and off-farm, to accommodate the growing quantity of goods destined for export markets. Producers often must store in-transit grain and oilseeds in open air, exposing these products to weather and pestilence. Without adequate storage capacity, producers are motivated to move output through marketing channels at harvest time, precisely when local prices are lowest. Bottlenecks at grain elevators and river terminals are common, as trucks rush to unload harvested grains immediately after the harvest. Export taxes and high port charges compound these extra costs (Schnepf, et al., 2001, 13).

To put these factors in perspective, Thomas Goldsby offers the following chart (Figure 2.11), which compares the geography and trade infrastructure of Argentina and the U.S., circa 2000:

	Argentina	United States
Landmass (sq km)	2.8 million	9.3 million
Paved highways (km)	57,000	255,650
Total rail trackage (km)	34,572	236,035
Navigable waterways (km)	11,000	41,935
Total grain storage (million tons)	53.9 (49 metric)	264 (240 metric)

Figure 2.11: Comparative geography and infrastructure between Argentina and the United States (Goldsby 2000, 12).

All things considered, Schnepf, et al., estimate that in 1998, the weighted average transport cost of one metric ton per 1,000 km in Argentina was \$63 USD. In the U.S., the same weight over the same distance cost \$16 USD. Schnepf, et al., argue, however, that

privatization and deregulation of railways and ports in the 1990s fostered a favorable climate for infrastructure development. Over time, privatized rail systems cut costs and improved services, port costs declined, and increased storage capacity reduced the need for harvest-time sales (Schnepf, et al., 13-14, 27). Argentina also enjoys a well-developed internal waterway in the Parana-Paraguay River system, located close to major grain and oilseed producing regions (Brooks and Lucatelli, 164).

Retail, Supply Chain Integration, and Value Added

As things stand, processing of soybean for soy oil and soy meal is only considered moderate value added. The value derived from crushing has increased as the price of soy oil has risen, but Nassar, et al., note efforts in China to promote domestic crushing capacity that could reduce these margins. In the long run, Argentina may gain a competitive advantage by adding further value to its products.

Value added distinguishes products from the competition. Producers may differentiate their product by improving quality (vertical differentiation) or by creating variety (horizontal differentiation). Horizontal differentiation may be as simple as packaging and branding. Brooks and Lucatelli argue that competition in the food retail sector encourages differentiation. The retail market responds to changing consumer demands for higher quality or greater service content, and thus impacts what is asked of primary producers. In this sense, stronger food coordination along the food chain and integrated management are becoming increasingly important determinants of competitiveness (Brooks and Lucatelli, 149-150).

The incentive to produce value-added goods depends largely on the income and preferences of foreign consumers. Although traditional markets in high-income countries continue to dominate world demand, long-term growth in demand is likely to come from countries outside Organisation for Economic Co-operation and Development (OECD) countries, namely from China and other South American nations. Whereas supermarket chains in OECD countries are increasing their demand for differentiated products and products that meet specific quality standards, high trade with emerging economies may

create less incentive for value-added products and thus put a ceiling on opportunities to gain market share through product diversity (Brooks and Lucatelli, 183). Many emerging economies, such as China, also care little for certification of best agricultural practices, labor relations, or environmental impacts of agricultural production, reducing incentives for producers to adapt to sustainability standards (Nassar and Antoniazzi 2011, 8).

Conclusion

Even if Argentina can narrow the “transport-cost gap” with the U.S (Schnepf, et al., 14), the advantages outlined in this chapter – natural resources, geographic advantages, export infrastructure, technology – are not sufficient to guarantee a long-term comparative advantage. Competitiveness also resides in a stable economic policy framework, in which producers can respond to policy and market signals with some predictability. Therefore, I find that the final determinant of competitiveness is the real exchange rate, which I believe to be an appropriate gauge for domestic price stability and good agricultural governance. The real exchange rate is thus the focus of the next chapter.

Chapter 3: The Political Economy of Prices, Global Market Integration, and Agricultural Incentives in Argentina's Export Sector

Introduction

Argentina needs its agricultural sector to be productive and competitive in international markets. The sector is the country's biggest source of comparative advantage. It comprises a significant share of GDP and national employment. Just as importantly, agriculture is Argentina's primary source of export revenue and foreign currency reserves, key to preserving macroeconomic stability. Historically, governments have relied upon agricultural surpluses to finance current account deficits in other sectors, particularly manufacturing. Policymakers must thus be mindful of how their decisions shape production incentives insofar as these decisions impact domestic price movements and expectations.

The government has a number of tools with which it can affect prices for agricultural goods, and thus production incentives and outcomes. These tools include control of access to international markets, direct government procurement of agricultural goods, formal price controls, subsidies, and taxation. When and how policy makers choose to use these tools depends on their goals and the interests they aim to serve. The agricultural sector has proven to be extremely responsive to shifts in prices for agricultural goods. But it is also very easy for policies to indirectly alter prices in unexpected ways. In a 1991 analysis of government intervention in the agricultural markets of developing countries, Krueger, et al., write:

Apart from their difficulties in foreseeing broad changes in the world prices of agricultural commodities, policymakers often failed to gauge accurately the effects of price intervention on such things as agricultural output, the government budget, and the balance of payments. Moreover, the makers of agricultural pricing policies often failed to anticipate the reactions of specific groups to price intervention. (Krueger, et al., 1991, 2).

A good example of a policy that incites unanticipated consequences is export taxes. Export taxes directly reduce producers' profit margins, in effect reducing the prices received for their goods. This is to be expected, and at times may be intentional, a stabilizing tool used to contain domestic food prices when international commodities prices are high. But to the extent export tax revenue is used to finance domestic food price controls or fund fiscal programs, these taxes may have an effect opposite what is desired. Not only might reductions in production (perhaps done in protest) reduce revenue, but sudden inflows of export revenue and accompanying increases in public sector spending may exert harmful inflationary pressures on the domestic economy.

This chapter focuses specifically on Argentina's management of the real exchange rate of the peso and the impact of the real exchange rate on the performance of the agricultural sector. For purposes of this paper, the real exchange rate is defined as difference in relative purchasing power of two currencies. In contrast to the nominal exchange rate, which represents the official market price of the peso, the real exchange rate is adjusted for inflation to reflect a currency's real purchasing power, in its home market and abroad.

Production responses to international prices are mediated by the real rate of exchange between the domestic currency and the currency of foreign consumers. In commodities markets, this currency is most often the U.S. dollar (Richards 2012, 456). The real exchange rate is particularly important for the agricultural sector (soy in particular) because of the sector's export orientation. When producers sell their goods on the international market for U.S. dollars, they must then repatriate that income by purchasing pesos from the government. The peso's nominal exchange rate is the number of pesos that producers receive per dollar of income. The real exchange rate, then, is a measure of the purchasing power of dollar-denominated income once it has been converted back to pesos ("pessified").

The real exchange rate is a useful metric not only because of its bearing on producers' ability to compete, but also because it is reflective of economic processes at

play inside Argentina. Foremost among these, the real exchange rate is an indication of macroeconomic stability. As will be explained below, an unstable macroeconomic climate, marked for example by high inflation, can cause an overvaluation of the peso, reducing the purchasing power of dollar-denominated income. Exchange rate overvaluation also sows uncertainty because it forces periodic devaluations of the peso, thus deterring foreign investment. For purposes of this paper, the real exchange provides a direct link between Central Bank governance, monetary policy, and agricultural competitiveness.

The Role of Export Agriculture in the Argentine Economy

Between 1960 and 2005, crop production in Argentina increased 300%. Between 1990 and 2005 alone, approximately 120,000 hectares per year were incorporated into agriculture. Meanwhile, input use and zero-tillage planting increased and genetically modified seeds for various crops were introduced. Yet despite extraordinary levels of productivity, agriculture's share of economic activity in Argentina has actually fallen since 1960 (Sturzenegger and Salazni 2007, 7). Development strategies centered on import substitution have replaced agricultural labor with machines, rural sector workers have transitioned to urban manufacturing, and industrial output has grown.

As demonstrated in Figure 3.1, which shows value added as a percent of GDP (measuring value added as net agricultural output after subtracting intermediate inputs), this trend has experienced a remarkable reversal. Over the past decade, agriculture's share of GDP has risen.

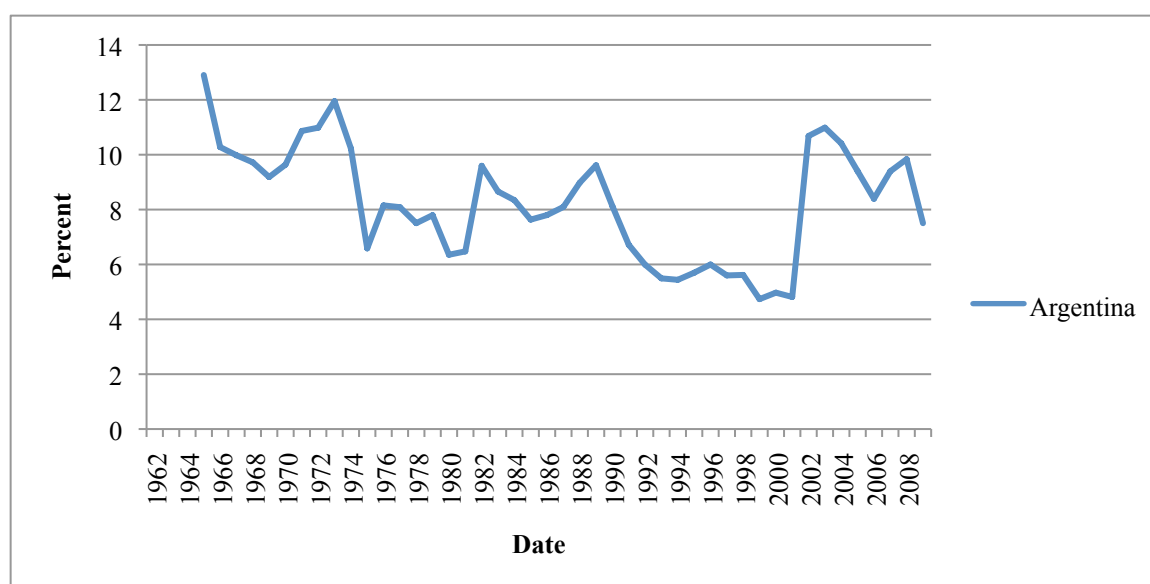


Figure 3.1: Value added in agricultural sector as a percent of GDP, 1965-2012.

Nogués finds that the extended agro-industrial sector generates closer to 19% of Argentina's GDP. The direct and indirect employment resulting from agricultural activity and its "backward and forward interrelationships" accounts for 35.6% of total employment. Agro-industrial chains account for approximately 56% of exports (Nogués 2008, 4). As a result, the agricultural sector is the country's primary source of foreign revenue and foreign exchange reserves. Compared with the U.S. and Brazil, Argentina relies directly on international markets as an outlet for its grain and oilseed production (Schnepf, et al., 2001, 4). Figure 3.2 shows production and export quantities for soy meal and soy oil in Argentina, indicating the extent to which soy byproducts depend on the international market.

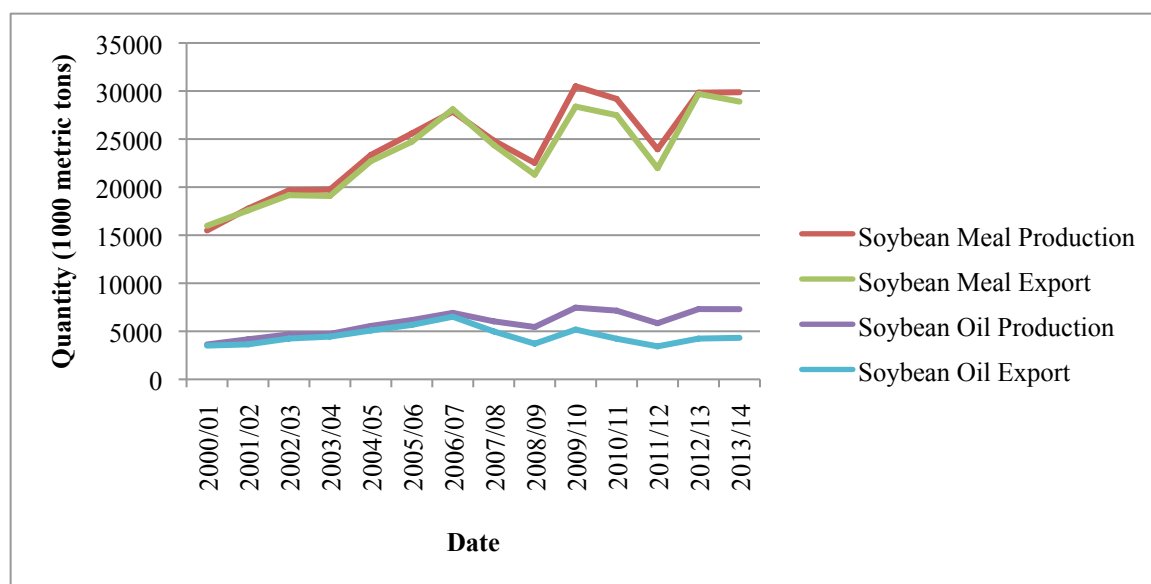


Figure 3.2: Production and export quantities for soy meal and soy oil in Argentina, 2000/2001-2013/2014 (United States Department of Agriculture Foreign Agricultural Service 2013).

It is also interesting to compare the export orientation of these products in Argentina, Brazil, and the United States. Figure 3.3, Figure 3.4, and Figure 3.5 show domestic consumption of soybean, soy meal, and soy oil in each of these three countries as a percent of total production.

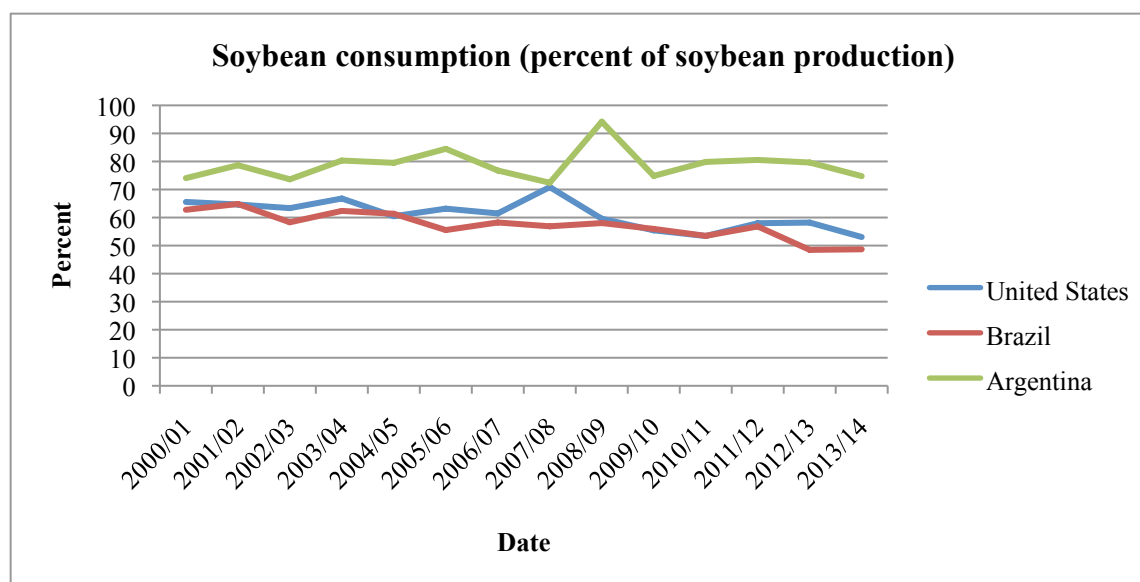


Figure 3.3: Domestic consumption of soybean as a percent of total soybean production in Argentina, Brazil, and the United States, 2000/2001-2013/2014 (United States Department of Agriculture Foreign Agricultural Service 2013).

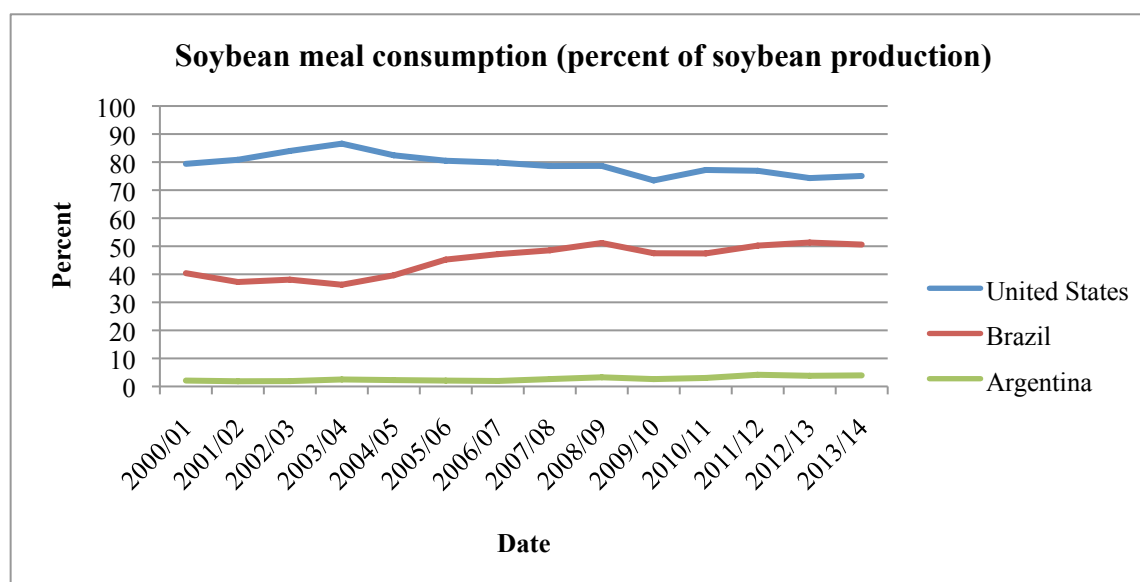


Figure 3.4: Domestic consumption of soybean meal as a percent of total soybean production in Argentina, Brazil, and the United States, 2000/2001-2013/2014 (United States Department of Agriculture Foreign Agricultural Service 2013).

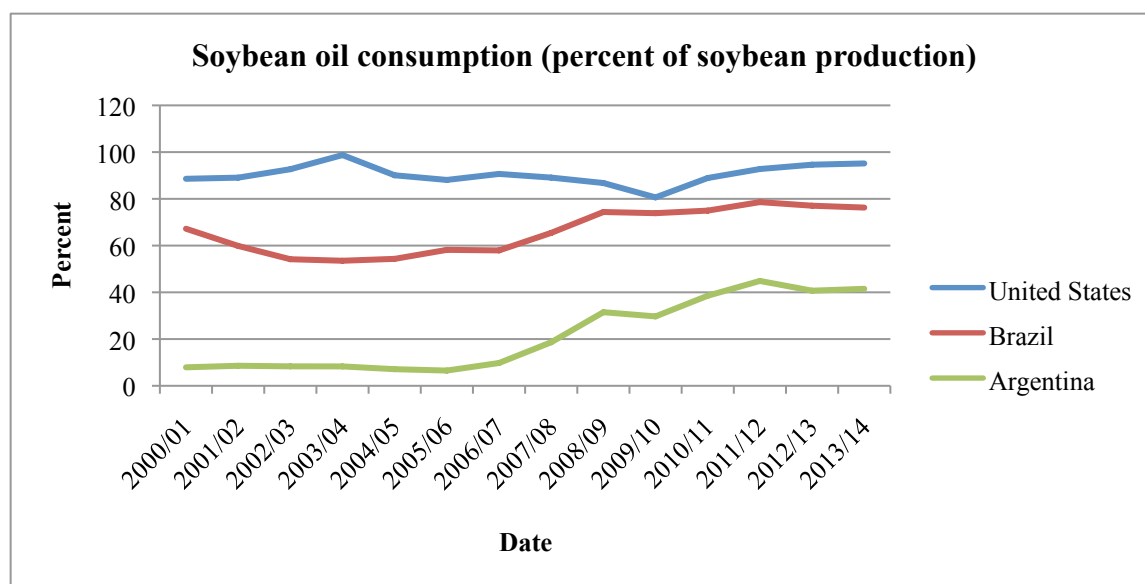


Figure 3.5: Domestic consumption of soybean oil as a percent of total soybean production in Argentina, Brazil, and the United States, 2000/2001-2013/2014 (United States Department of Agriculture Foreign Agricultural Service 2013).

Brooks and Lucatelli note that agriculture and its related industries have historically offset trade deficits in other sectors (Brooks and Lucatelli, 152). At the same time, agricultural exports generate significant government revenue. Export taxation allows the government to raise fiscal revenues with little lag time, low collection costs, and low rates of tax evasion (Sturzenegger and Salazni 2007, 18; Nogués 2008, 4). By Lence's calculations, agriculture and related activities were responsible for 40% of total tax revenue in Argentina between 1997 and 2001, and more than 45% between 2002 and 2005 (Lence 2010, 413). Sturzenegger notes that between 1961 and 1985, export taxes became an increasingly important way to finance public expenditure, while import taxes became increasingly less important (Sturzenegger 1991, 30).

Exploring the Relationship between International Prices and Agricultural Output

To collect revenue and accumulate foreign reserves, the government needs the agricultural sector to be productive. Agricultural producers are adeptly responsive to

changes in domestic and international prices for their products. Sturzenegger identifies prices as a significant variable in determining agricultural behavior at both the product and sectoral levels, particularly in the Pampa. Changes in relative prices, brought about for example by the use of new machinery, introduction of more profitable technologies like hybrid seeds, or transition to new crops such as soy, can lead to significant changes in the structure of agricultural output (Sturzenegger 1991, 26).

Price-responsiveness varies between the short and long run. Sturzenegger notes that in some cases, aggregate agricultural output does not respond to short-run variation in agricultural prices relative to prices in the rest of the economy. Often short-term output response to changes in prices is weak if inputs costs are fixed. But certain inputs, including fertilizer, agrochemicals, energy inputs, marginal land, tractor hours, and hired labor are variable in the short run, meaning that price increases can elicit responses even in a short period of time (Sturzenegger 1991, 26-27). According to Krueger, et al., “there are good reasons to believe that production of individual crops responds in the short run to changes in relative prices between crops, as well as to changes in relative differences between input and output prices” (Krueger, et al., 1991, 8).

In an attempt to determine the long-run responsiveness of Argentine producers to changes in incentives on behalf of the BCRA, Lanteri investigates the effect of pricing policies, risk, and other non-price factors on soybean acreage over time. He concludes that the response of soybean supply to economic incentives is significant. He writes, “In terms of policy these supply elasticities mean that depressed prices may cut down substantially soybean production from one year to the next, or on the other hand, a spectacular increase in area planted could be expected from an increase in the level of soybean relative prices” (Lanteri 2008, 59).

Supply elasticity for soy, Lanteri finds, is highest in regions where conditions for production of other crops, such as maize, are suboptimal. In those areas, farmers can expand soy production with greater ease, occupying, for example, deforested lands (Lanteri 2008, 83). He also notes that supply is more responsive to price in areas planted under wheat, given that soy can be planted in a second crop cycle in the same season and

on the same land as the wheat harvest. Following the wheat harvest, farmers tend to be less deterred by external sources of risk to the soy harvest (Lanteri 2008, 77).

Adopting a different angle, Urbiztondo, et al., contend that soy expansion is a response to macroeconomic uncertainty as much as it is a response to higher prices. For example, they note, soybean and livestock compete for land. Compared to soy, cattle-raising is relatively capital-intensive and allows for little flexibility over time. The likelihood of export taxes reduces the relative value of future profits to current returns, affecting the long-term value of capital stock, such as cattle. Producers have thus reallocated cattle production toward marginal areas, or reduced cattle stock altogether, in response to increased uncertainty and policy interventions in agricultural production (Urbiztondo, et al., 2009, 52).

By the same logic, producers evidently prefer crops that involve cost-reducing technologies rather than crops that involve yield-increasing technologies. Yield-increasing technologies, Urbiztondo, et al., explain, expand the marginal product of inputs. This of course means that such crops rely on increased application of inputs, which often have variable costs. This consideration has contributed to reductions in the production of wheat and corn (Urbiztondo, et al., 2009, 52).

Real Exchange Rate and Exchange Rate Misalignment: Currency Value as an Agricultural Interest

A key determinant of price for agricultural exports is the real exchange rate. To understand how the real exchange rate affects price, and in turn affects competitiveness, it is important to clearly define the real exchange rate and the factors that the real value of the peso.

Definition of the Real Exchange Rate

The nominal exchange rate is defined as the domestic price of a particular foreign currency (or basket of foreign currencies). By this definition, the nominal exchange rate

of the peso with respect to the U.S. dollar refers to the number of pesos required to purchase one U.S. dollar. For instance, if the nominal exchange rate of the peso is five, it costs five pesos to purchase one dollar. As long as prices remain constant in Argentina and the United States, this nominal exchange rate is adequate to sustain trade between the two countries over time.

Problems arise, however, if prices in one country change at a different rate than prices in another country with which the first country trades. If the former country experiences high inflation, for example, and the domestic purchasing power of its currency decreases, at a fixed nominal exchange rate between the currencies of the two countries, the former currency becomes more expensive to purchase, given that it now buys less in its home market. The converse is also true: At the fixed nominal rate, the latter currency is now cheaper to buy relative to the domestic value of the former currency.

Building upon the previous example, we assume that the nominal exchange rate is five-to-one, reflecting some predetermined market-equilibrium basket of prices that pegs the value of one dollar at five pesos. At this equilibrium nominal exchange rate, the price of a pound of sugar in the U.S. is one dollar and the price of that same pound of sugar in Argentina is five pesos. Over time, however, let's assume the price of a pound of sugar increases to two dollars in the United States while remaining constant at five pesos in Argentina. At the current nominal exchange rate (setting transport costs and tariffs aside), an Argentine citizen must now exchange 10 pesos for the two dollars required to purchase the same pound of sugar in the United States. The purchasing power of the dollar has declined, even though the nominal price of that dollar in pesos has stayed the same. In the long run, unless the nominal price for dollars decreases, it is not rational to continue purchasing dollars, given the dollar's declining purchasing power.

The nominal exchange rate is thus a poor metric for determining a currency's real value. Governments can manipulate the supply and demand of that currency to preserve or attain a desired nominal value, but the nominal value does not necessarily account for the purchasing power of that currency. The real exchange rate, on the other hand,

accounts for the relative prices of comparable goods (e.g. a pound of sugar) in foreign and domestic markets, adjusted for the nominal values of each market's currency. In other words, the real exchange rate measures the price of a foreign currency based on the purchasing power of that currency once it is in hand.

Mathematically, Ickes defines the real exchange rate, Q , in the following manner:

$$Q = SP^*/P$$

where S is the spot exchange rate (or domestic price for one unit of foreign exchange), P^* is the foreign price, and P is the domestic price. In this equation, assuming the nominal exchange rate remains constant, the real exchange rate, Q , depreciates when domestic prices (denominator) increase relative to foreign prices (numerator), i.e. when domestic inflation increases at a faster rate than foreign inflation. Somewhat counter-intuitively, this means that the real price of the domestic currency has appreciated relative to the foreign currency. Conversely, again assuming a constant nominal exchange rate, the real exchange rate appreciates when foreign prices increase relative to the domestic price, causing the value of the domestic currency to depreciate (Ickes, 1-2).¹

The positive correlation between inflation and the real value of the domestic currency, although counter-intuitive, makes sense. If domestic prices increase relative to foreign prices because of higher rates of inflation, and if the nominal exchange rate does not adjust, the domestic currency now has more purchasing power abroad than at home. Conversely, under the same conditions, the foreign currency, once converted to domestic currency, now has less purchasing power in the inflationary conditions of the domestic economy. It follows, then, that given a real appreciation of the domestic currency and assuming no transport costs or trade restrictions, there is now incentive to buy goods at a

¹ There seems to be some discrepancy in the literature regarding the semantics of describing the real exchange rate. To avoid confusion, I adhere to Ickes' definition and the generally excepted foreign/domestic price ratio, which equates an appreciation in the real exchange rate of the domestic currency with a real depreciation of the value of the domestic currency and a real increase in the price of foreign currency.

lower price abroad and sell them at a higher price on the domestic market. More importantly in the context of international trade, if domestic inflation is high relative to foreign inflation, as is often and currently the case in Argentina, locally-sourced inputs such as labor become more expensive. Foreign producers gain a competitive advantage because they can produce goods more cheaply than domestic producers.

This is a most important point in the context of the Argentine economy: Even though inflation reduces the purchasing power of the peso in the domestic economy, unless the nominal exchange rate adjusts, higher inflation in the domestic economy relative to the economy of Argentina's trade partners will weaken the purchasing power of dollar-denominated export income, while foreign goods will become cheaper relative to domestic goods. The opposite also holds true: A lower inflation differential causes a real depreciation of the peso against the dollar. The peso has less purchasing power abroad and greater purchasing power at home. At a fixed nominal exchange rate, domestic goods become cheaper relative to foreign goods.

Predicting Change in the Real Exchange Rate

Inflation-induced changes in the real exchange rate may be caused by forces generally associated with inflation, such as supply chain bottlenecks or increases in a country's money supply. But Ickes offers two notable causes for changes in the real exchange rate associated with shifts in supply and demand. The first cause is an increase in demand for domestic goods, which will cause the price of domestic goods to increase relative to the price of foreign goods. Under such a scenario, the real exchange rate depreciates and the purchasing power of the domestic currency relative to other currencies increases. The second cause is a change in output supply. Advances in efficiency (or in the case of agriculture, improvements in yield), for example, will lead to excess supply in the domestic market if domestic demand cannot keep pace. In that case, the relative price for domestic goods must fall. The real exchange rate will appreciate accordingly, and the value of the domestic currency will depreciate. In this event, the purchasing power of the foreign currency has increased. Thus, Ickes writes, "relative

productivity growth causes the real exchange rate to appreciate and the real value of the currency to depreciate” (Ickes, 3).

These two scenarios described by Ickes represent real changes in the real exchange rate driven by changes in demand or productivity. But policymakers can also influence real exchange rate valuation indirectly through exchange rate manipulation, macroeconomic policy, capital controls, or sterilized foreign exchange interventions (Steinberg 2008, 4). There is strong incentive to do so, for as Ickes points out, the real exchange rate is a measure of competitiveness and a useful variable for explaining trade behavior and national income (Ickes 2007, 1-2). Where there is disparity between the real exchange rate and the nominal exchange rate, intentional or otherwise, the result is real exchange rate misalignment. As Steinberg describes it, “Overvaluation refers to situations where the real exchange rate is below its equilibrium rate: when a given bundle of domestic goods can purchase a larger quantity of foreign goods than with a market-determined exchange rate. When the exchange rate is undervalued, domestic goods and exports are cheap relative to foreign goods and imports” (Steinberg 2007, 4).

Accordingly, in the case of Argentina under the fixed peg of the convertibility regime, a higher rate of inflation at home than in the markets of Argentina’s trading partners decreased the purchasing power of the peso at home, but the same phenomenon increased the purchasing power of the peso abroad. Because the nominal exchange rate did not adjust, the nominal price of the peso (one dollar under convertibility) remained too high relative to the real purchasing power of foreign currencies in Argentina’s markets. Goods in foreign markets became cheaper than goods on the domestic market. This disparity only grew as domestic inflation rose. Over time, the overvalued price of the peso proved unsustainable.

In the case of Argentina, the real value of the peso matters most vis-à-vis Argentina’s primary trading partners. These include Brazil, the European Union, increasingly China, and the U.S. The benchmark by which the real value of the peso is most usefully gauged, however, is the U.S. dollar, as commodities prices are generally denominated in dollars on international markets.

Sources of Exchange Rate Misalignment

Real exchange rate misalignment occurs as a result of unsustainable monetary, fiscal, and trade and exchange control policies, and “occurs in markets in which actual exchange rates are not allowed to adjust to changes in economic fundamentals.” Pick and Vollrath use a typology that distinguishes between “justified” and “unjustified” changes in the real exchange rate. Justified changes, such as those described by Ickes above, refer to a shift in the equilibrium exchange rate that may be brought about by technological progress, shifts in the external terms of trade, or other events that impact supply and demand. Unjustified changes, on the other hand, are “departures” from the equilibrium exchange rate induced by direct policy intervention (Pick and Vollrath 1994, 555-557).

A powerful source of changes in the real exchange rate is foreign investment. Inflows of foreign capital, for example, can foster technological advances that increase a sector’s productivity, causing domestic prices to fall and the real exchange rate to justifiably appreciate. Capital inflows might also indicate an increase in demand for domestic goods and similarly depreciate the real exchange rate and increase the price of the domestic currency. But if these inflows are speculative, demand can be extremely volatile and destabilize the real exchange rate. To understand the impact of foreign investment, it is thus necessary to examine the nature and destination of that investment.

As a case in point, Starr argues that Argentina’s foreign investment-driven export growth during the 1990s had little to do with increased investment and/or productivity in the export sector itself. Rather, the majority of foreign direct investment targeted production of non-traded goods. In the long run, investment in non-tradable sectors increased economic efficiency and helped contain domestic prices, thus partially compensating for losses of competitiveness resulting from other sources of inflation. After all, even in the agricultural sector, more than half of farmers’ costs at the border point of the value chain are for non-traded goods and services subject to rising domestic prices (Sturzenegger and Salazni 2007, 19). Over time, however, these gains in efficiency could not compensate for the appreciation caused by the fixed exchange rate and increased demand for the peso (Starr 1997, 96). As a result, export competitiveness

declined. The next section examines more closely this relationship between exchange rate misalignment and agricultural competitiveness.

Impact of Exchange Rate Misalignment on Agricultural Production and Competitiveness in an Open Market

The real exchange rate is an important factor in determining trade performance and, by extension, agricultural production. Drawing upon lessons learned from U.S. agricultural governance in the 1970s, Schuh identifies a fundamental relationship between exchange rate misalignment and agricultural competitiveness in global markets. Producers in countries with overvalued currencies have no choice but to either raise their dollar-denominated prices or reduce their margins. Since foreign demand is elastic (a reflection of long-run cost dynamics in the foreign home market), if producers respond to overvaluation by increasing their export price, foreign demand for that product will fall, particularly in a competitive market. A decrease in foreign demand will further lower the price in the domestic market as the supply for domestic consumption increases and the opportunity cost of selling on the domestic market decreases. As a result, “the product is under-valued in relation to its equilibrium-exchange rate, foreign-market alternatives” (Schuh 1974, 3).

Particularly in a country like Argentina, in which agricultural trade plays an important role in the balance of payments as a primary source of foreign exchange earnings, Schuh argues that the exchange rate must be treated as an endogenous variable impacting agricultural trade performance. In his estimation, an overvalued currency is an implicit export tax, the impact of which depends on the elasticity of foreign import demand and the elasticity of domestic factor supplies (Schuh 1976, 804-807). In the long run, by reducing agricultural competitiveness, an overvalued exchange rate reduces farmer incentives to produce (Pick and Vollrath, 562-563) and can significantly reduce agricultural export earnings (Schuh 1974: 3).

Under open trade conditions, world markets are thus characterized by complex interactions between domestic monetary policy, the exchange rate, and competitive potential abroad. Reflecting on conditions in the United States, Schuh writes:

An increasing tightness in monetary policy, for example, will attract a larger capital inflow, other things being equal, due to the rise in interest rates that it implies. The larger capital inflow, other things being equal, will raise the value of the dollar and in turn reduce the competitive potential on the trade account.

Given these interdependencies, he continues, agricultural economists must pay greater attention to monetary and fiscal policy if they want to understand developments in the agricultural sector (Schuh 1976, 806).

Trade liberalization complicates these relationships. Reductions in tariffs and export taxes tend to shift private investments toward the production of export commodities, ease access for importers, and open new markets to producers. The consequences for production are significant. Richards, et al., find that growth in South American soybean production is inherently linked to trade liberalization and the related “growth in global demand and new access to regions which, through infrastructure developments and the relocation of essential farming skills and capital, have only recently been incorporated into global networks of food consumption and production.” Neoliberal economic reforms in South America allowed greater consumer access to the region’s natural resources. When combined with currency devaluation, greater demand yielded high rates of return on soybean production. Producers could then capture more investment capital for the industry and rapidly expanded with the help of both domestic and international investors (Richards, et al., 2012, 455).

Richards, et al., show that in an economic environment of undervaluation, it is possible that agricultural profits in a country such as Argentina can increase even as global prices stabilize or fall. For example, despite the falling dollar price of soybean between 1997 and 2002, “currency devaluations were creating favorable economic conditions for soybean producers, with positive exchange effects from the late 1990s and the early 2000s providing incentives for new production during that period.” Likewise,

in the event that excess global demand outstrips excess supply, a country like Argentina may see a rise in global prices alongside a favorable currency exchange. Such was the case in South America after 2002, much to Argentina's benefit (Richards, et al., 2012, 456-8).

Of course, commodities such as soybean and corn rely heavily on imported stocks of fertilizer and imported machinery. Devaluation of the local currency can cause purchasing costs for these goods to rise. The fact that inputs are often purchased months in advance of harvests complicates profit calculations, given that the nominal exchange rate may change between planting and harvesting. The net effect of a devalued currency thus depends on the extent to which the value of crops produced exceeds the value of the required inputs. It is also important to consider that much time passes between investing in land conversion or expansion, training necessary labor, and getting final output to market (Richards, et al., 456-458).

There is evidence to suggest that Argentine producers couch their assessment of the real exchange rate in these very terms, as the disparity between cost and income. Speaking with *La Voz del Campo*, Federico Landgraf, an economic advisor at Coninagro, notes that in March 2008, with soy prices at \$358/ton, producers needed to sell 2.02 100-kg bags of soy to buy 100 liters of gasoline. In June 2012, with soy prices at \$326/ton, producers needed to sell 3.91 100-kg bags of soy to buy the same amount of fuel. In other words, as a result of inflation and overvaluation of the peso akin to the 1990s, the local purchasing power of soy revenue steadily deteriorated over the course of four years (Rollán, 2012).

Conversely, Richards, et al., offer empirical evidence that nominal currency devaluation against the U.S. dollar in the late 1990s and early 2000s was an important driver in accelerating agricultural growth in South America. They estimate that between 1995 and 2012, 31% of new soybean production in Brazil, Bolivia, and Paraguay, equivalent to approximately 80,000 square kilometers, can be attributed to the devaluation of local currencies in the late 1990s (Richards, et al., 454-455). In the Argentine case, Fairfield cites estimates that producers' profits would have been on

average 55% lower in 2003 and 2004 had the exchange rate remained at parity with the dollar, as it did under convertibility (Fairfield 2011, 432). Richards, et al., conclude:

These findings reinforce the notion that currency dynamics are a significant determinant of the international spatial distribution of agricultural growth, and offer the implicit suggestion that they also are integral in distributing the global degradation of environmental services.

Notably, Richards, et al., emphasize that few industries are likely to be as responsive to major currency fluctuations as the soybean industry (Richards, et al., 2012, 454-455).

The case made by Richards, et al., is very much in line with an argument first advanced by Frieden (1994). Frieden suggests that the distributional impact of exchange rate movements increases as economies become more open on capital and current account. Trade openness thus increases the intensity with which monetary trade-offs are felt by economic actors. “Greater exposure to world trade,” he finds, “swells the ranks of those sensitive to the exchange rate.” Producers of traded goods are particularly sensitive to the exchange rate. But even producers of non-traded goods care more about exchange rates as an economy opens to trade because the price of the import component of inputs changes. Frieden concludes that higher levels of international trade and payments result in greater politicization of currency policy; the exchange rate then becomes a target of important political conflict (Frieden 1994, 82). This will be discussed in greater detail in Chapter Six.

Strategies for Preventing Real Exchange Rate Misalignment

While exchange rate misalignment is often the result of policy intervention in currency markets, real currency appreciation can gain momentum unintentionally. Reflecting on exchange rate misalignment in Argentina in the 1990s, Starr (1997) saw serious risk in the appreciation of Argentina’s peso. Argentina, she writes, had become too reliant on volatile foreign capital flows to ensure a steady expansion of foreign reserve holdings to preserve convertibility. Starr suggested three strategies for slowing

the real appreciation of the peso. First, Argentina could devalue the peso through the nominal exchange rate. This option represented a one-off solution to the problem of overvaluation but would damage the credibility of the currency board and convertibility regime (Starr 1997, 115).

The second option was to embrace deflation by reducing the money supply. This strategy relies on global inflation differentials to depreciate the currency. In a deflationary environment, Argentina would have to bear low growth rates for an extended period of time. As things stood, by 1996 inflation was under control, the real value of the peso was appreciating against the dollar, and the economy was in recession. Government spending was already constrained by convertibility and a sharp reduction in tax revenue resulting from overvaluation. She writes (Starr 1997, 115):

Lacking sufficient funds, the government was unable to mount an effective response to its supporters' frustration with the highest unemployment rate of the century, with the decline in real wages and pensions, with the rise in poverty, the poor schools, the limited access to credit, the lack of demand in the economy, the high bankruptcy rate, and the country's non-competitive exports.

The third strategy was to increase productivity. This strategy aimed to bring down the value of the currency and increase competitiveness by increasing the efficiency of Argentine producers. According to Starr, President Menem embraced this strategy, hoping that increased efficiency would also keep inflation in check. Unfortunately for Menem, this strategy required time, as well as either government spending or tax cuts. Moreover, increasing productivity through labor reform meant splitting his coalition. Menem pushed forward with his productivity strategy, and in the end it cost him labor's support (Starr 1997, 118).

Like overvaluation, undervaluation has its own drawbacks despite its perceived advantages in international trade. Argentina's historically high levels of government debt, for example, are a meaningful deterrent to devaluation (Schnepf, et al., 2001, 33). To the extent that foreign debt is denominated in dollars, which in Argentina is a widespread phenomenon, devaluation increases the value of this debt.

Undervaluation also increases the price of imported goods, such as manufacturing inputs. Beyond that, Richardson writes (Richardson 2008, 246):

Historically in Argentina, devaluation had the double inflationary effect of raising the price of exports while also increasing the price of domestically produced wage goods that were reoriented to export markets. These inflationary pressures would erode any gains in real terms from the nominal wage increases.

Undervaluation is thus politically contentious, beckoning back to Frieden's observation concerning the distributive consequences of exchange rate valuation. In an open market, the real value of the peso will inevitably lead to winners and losers. In the past, the government has managed exchange rate-related tradeoffs through compensations.

The Politics of Real Exchange Rate Compensation

Throughout Argentina's recent history, governments in Argentina have opted to use compensations to appease actors whose interests are undermined by the real exchange rate. Compensations effectively permit politicians to keep together socioeconomic coalitions comprised of actors with divergent interests (Mediavilla 2013, 99).

Sturzenegger and Salazni make a strong case that export taxes are one such compensation strategy. The authors identify empirical evidence that suggests a significant relationship between the real exchange rate and changes in nominal rates of government assistance to the agricultural sector. The nominal rate of assistance (NRA) is a method of quantifying the anti-agricultural nature of Argentine price and trade policies. NRA estimates take into account tariffs on imported inputs, taxes or subsidies on exports, non-tariff barriers to trade, state marketing boards for tradable products, domestic taxes and subsidies, and other trade pricing policies (Sturzenegger and Salazni 2007, 12).

The authors find that the value of the peso and NRA at the farm level are positively correlated. In other words, when the peso appreciates, the NRA also tends to increase. Conversely, when the peso depreciates, the NRA decreases. Sturzenegger and Salazni write:

When there were changes in different exogenous variables that affect agricultural incentives (such as RER [real exchange rate], international relative prices and relative productivity growth prospects of each product), the NRAs at the farm level changed, and they did so in a partially compensatory way.

In this capacity, taxation has served as a tool to stabilize real rural income and real returns to agricultural fixed assets, namely land (Sturzenegger and Salazni 2007, 15).

This relationship between the real exchange rate and export taxes held during and post-convertibility. Although the fixed peg caused a constant appreciation of the peso, President Menem also eliminated export taxes on agricultural commodities and import tariffs on agricultural inputs (Schnepf, et al., 2001, 19). As will be discussed in Chapter Six, urban sectors were similarly compensated during the period of undervaluation following the 2001 economic crisis. As theorized by Richardson (2008), President Kirchner kept the peso undervalued to promote exports, but at the same time heavily taxed agricultural exports in order to subsidize domestic price controls for wheat and beef. Fairfield, citing an Undersecretary for Public Revenue at the Ministry of Economy, notes that undervaluation under the Kirchner administration would not have been sustainable without compensatory export taxes (Fairfield 2011, 432).

The Politics of Export Taxes

There is a long tradition of export taxes in Argentina. These taxes were eliminated within the neoliberal framework of the Menem administration but were reintroduced following the collapse of the convertibility regime and devaluation of the peso in 2002. The taxes are collected from export companies, who in turn pass the burden to producers.

According to Fairfield, export taxes serve several purposes. First, they extract revenue from the highly profitable agricultural sector, which can then be redistributed as compensation, investment, or social spending. As will be discussed, the executive branch prefers export tax revenue because in addition to advantages previously mentioned,

including low enforcement costs and low evasion rates, these taxes can be imposed without legislative approval and need not be distributed to the provinces through federal revenue sharing agreements. Export tax revenue played a key role in reestablishing fiscal solvency after the 2001 crisis and has since helped Argentina sustain a fiscal surplus.

Second, export taxes are a key component of Argentina's industrial policy. Fairfield argues that export taxes "[equalize] the profitability of primary and processed products, thereby stimulating agro-industry, which [generates] substantial employment." For example, the administration of President Cristina Fernández de Kirchner offers *reintegros*, or rebates, on a percentage of the domestic taxes that exporters pay during production and marketing. These rebates are calculated based on total value added in the country. In other words, rebate rates are higher for producers of value-added goods (Pallares, 2012).

Third, high export taxes on wage goods, such as wheat and beef, suppress domestic prices for basic consumer goods. This is an effective strategy for wage goods because demand for these goods is inelastic. If exports become more profitable, domestic prices rise (Fairfield 2011, 426). The following section focuses on this stabilizing function of export taxes.

A Trade-Off between Price Stability and Profit?

In light of the global spike in food prices in 2008 and resurgent food prices in 2010 and 2011, policymakers in Argentina fear the prospect of transmission of global food prices to domestic markets. Export taxes are one tactic for insulating the domestic market from volatility in the external sector. By "driving a wedge between domestic and international prices," writes Richardson, export taxes can mitigate the inflationary pressures of rising export prices (Richardson 2008, 241).

As early as 1991, however, Sturzenegger focuses on the role of export taxes in protecting against price volatility. He predicts that variance in prices is lower when the government intervenes in agricultural markets than when it does not. The government attains this stability by increasing taxes as international prices increase, and vice versa. In

fact, Sturzenegger finds that relative prices are the main causal variable explaining short-run variation in export taxes. This relationship between prices and export taxes extends to subsectors of the agricultural sector, so that the most productive products are the most highly taxed (Sturzenegger 1991, 36, 38).

One might explain export taxes within the context of a “political market,” with representatives from agricultural sectors on one side and representatives from other sectors on the other. When agricultural profits decrease, agricultural producers tend to exert more pressure on the political market to reduce taxes. Conversely, when profits increase, political pressure from agricultural groups abates (Lence 2010, 427). Taxes thus factor into the cost-benefit analysis of political action, a deterrent to agricultural interest articulation that will be discussed in Chapter 6.

It is conceivable that even agricultural interest groups are more interested in price stability than price value. Frieden writes (Frieden 1994, 86):

Where policy toward the level of the exchange rate and its variability are linked and actors’ interests cut in different directions, they must decide which matters more to them. Exporters weigh the relative importance of the increased competitiveness given by a devaluation against the uncertainty that devaluations introduce. For some – especially with long-term contracts where hedging is difficult – variable exchange rates may lead to substantial loss of business. For others, the added competitive edge dominates.

The agricultural sector’s mobilization against export tax increases may have answered Frieden’s question. The object of the sector’s discontent, a flexible tax scheme that would have increased export tax rates on soy and other agricultural goods in accordance with commodities prices, established predictable tax rates that, if nothing else, introduced a degree of certainty into the tax system. But the measure crossed a threshold beyond which the size of the taxes became more important than their predictability.

Given the share of export revenue and foreign currency reserves that the agricultural sector provides, policymakers must be mindful of the impact export taxes may have on agricultural production. Krueger, et al., nicely sum up the flawed rationales

that have traditionally justified export taxes: The ease of export tax collection in countries where the tax base is thin or the institutional capacity to collect other types of taxes is limited; inelasticity of agricultural output in response to changing incentives; and declining terms of trade for primary products. They find significant error, however, in these assumptions. They write (Krueger 1991, et al., 2-3):

Evidence has accumulated that strongly suggests that agriculture is a dynamic sector that responds positively to price incentives and that 'policies which tax agriculture reduce the investment in agriculture, increase outmigration, and reduce the implementation of new techniques. Much of the earlier pessimism about the trade prospects in agriculture overlooked cost-reducing technological innovations and export growth of nontraditional agricultural commodities, which would give the economies of the developing countries more flexibility to cope with changing conditions in the international economic environment.

As we will see, this line of reasoning is apropos in the Argentine context. With regard to the controversial 2008 tax measure, Richardson (Richardson 2008, 251) writes that at beyond a certain marginal tax rate (which would reach 95% in extreme cases),

farmers had little incentive to hold harvested grain for sale at a later date because they would only receive 5% of any possible price increase. This had potentially adverse effects on futures markets and agricultural credit mechanisms linked with futures, and promised to depress grain prices further at harvest due to oversupply.

This is not to say that stability of tax rules is not also a key driver of agricultural investment decisions. An additional compelling factor behind the 2008 protests was the fact that the tax increase was announced just prior to the harvest. This meant that producers had invested in production under the previous tax scheme, based on profit calculations responding to higher international prices (Fairfield 2011, 440).

Conclusion

This chapter demonstrates the power of the price incentive on agricultural production and trade. In international markets, prices for agricultural goods are mediated

by the real exchange rate, which in turn is determined by both domestic and international market conditions. Once the important role of the real exchange rate is understood, the logic behind its relationship to competitiveness is relatively straightforward: undervaluation of the exchange rate increases export competitiveness; overvaluation, for the most part, does the opposite. The result is a give and take between the government and agricultural exporters. Producers respond to price incentives created by public policy, and the government modifies its policies in response to changes in agricultural production and competitiveness.

The desirability of exchange rate misalignment one way or another is dubious, in part because of the distributive consequences of the exchange rate between producers of traded and non-traded goods and between net importers and net exporters. The government has tools at its command to compensate economic actors who are harmed by policies affecting the currency's value, which lends some flexibility to its management of the real exchange rate but has also been the source of macroeconomic instability. The following chapter takes a closer look at Argentina's history of intervention into the real exchange rate.

Chapter 4: Central Bank Policymaking and its Impact on the Agricultural Sector

Introduction

The Central Bank of Argentina (*Banco Central de la República de Argentina*) (BCRA) is the institution with the most direct influence over the real exchange rate. The BCRA's main responsibilities have changed over time, most markedly under the convertibility regime of the 1990s. The bank's current mandate officially requires it to make and implement a consistent monetary policy, ensure a balanced money market, and foster savings and investment (Central Bank 2013, *Objectives*). Toward these ends, the BCRA most directly influences markets through its management of Argentina's money supply, which among other things dictates Argentina's nominal exchange rate.

In Argentina, managing the various facets of the bank's mandate is no easy task. The country has battled persistent inflation and balance of payments crises since the 1970s. Policymakers have responded by experimenting with a number of stabilization programs, to varying degrees of success. Traditionally, the main challenge facing the BCRA is to quell inflation without sacrificing economic growth.

Argentina's monetary policymaking gained true notoriety in 1991 with the passage of the Cavallo Plan. Named for President Menem's Finance Minister, Diego Cavallo, the plan was a direct response to hyperinflation. It installed a new monetary regime organized around the concept of convertibility. Convertibility accomplished four objectives: it fixed the exchange rate between the dollar and the peso; established full convertibility between the two currencies; required that the BCRA hold foreign reserve requirements equivalent to the current supply of pesos in the market; and prohibited the bank from lending to the federal government, in effect limiting the government's ability to deficit-spend. The new arrangement for managing Argentina's exchange rate, money supply, and foreign reserves brought inflation under control, but contributed to an overvalued exchange rate that ultimately spawned a massive devaluation, financial crisis, and the fall of the convertibility regime.

Since 2003, Argentina has moved in the direction of a new kind of monetary regime. The Central Bank reforms of the 1990s have slowly been rolled back and the BCRA has regained many of the responsibilities that defined its mandate prior to the implementation of the Cavallo Plan. Reforms to the Central Bank charter passed into law in April 2012 finally do away with the last remnants of convertibility, setting new standards for determining the money supply and reauthorizing bank purchases of government bonds, effectively restoring the bank's lending authority.

The BCRA's 2013 Program expresses the bank's frustration with the former limitations of the Cavallo Plan, as well as its pleasure with the restoration of what it feels to be its original mandate. The BCRA states (Central Bank 2013, *Programación 2013*, 2):

Thus, the BCRA that was designed for a single function, with limited instruments and without adequate coordination with other economic policies, has transitioned to a central bank with multiple objectives and a coherent plan in line with the greater political economy. In this way, objectives that characterized the bank's functions from the bank's creation in 1935 until the 1992 reforms have been restored.

Wiesner frames these competing mandates as a choice between rules and discretion (Wiesner 2008, 95). It is clear that in the mind of the Fernandez de Kirchner administration and the current leadership at the BCRA, discretionary flexibility in monetary policymaking takes precedence. Flexibility is perceived as necessary to bring "sustainability and consistency" to Argentina's macroeconomic regime, promote growth, and generate employment. The bank thus promises to continue intervening in currency and money markets in order to moderate exchange rate volatility and create conditions for growth and financial stability (Banco Central, *Programación 2013*, 14).

When comparing the current mandate to convertibility, however, it is important to bear in mind that there is a difference between an institutional framework in name and in practice. Wiesner stresses that even during convertibility, the Central Bank was not immune to political pressures to assume macroeconomic risks. "A Central Bank," he

writes, “needs the support of a political demand for macroeconomic stability and the attendant political support for fiscal and other policies that would deliver that macroeconomic stability.” Instead, Argentina’s political process rewards high-risk and opportunistic policies over policies that have a “higher probability of safeguarding the general welfare” (Wiesner 2008, 111).

With this in mind, this chapter looks at the BCRA’s historical relationship with the productive sector in Argentina. How do bank operations affect prices? Does the bank consider promotion of export competitiveness to be part of its mandate? Answering these questions will lend some perspective on how the new Central Bank charter will impact the agricultural sector.

History of Monetary Policy During and Post-Convertibility: An Evolving Central Bank Mandate

Implemented on the heels of two episodes of hyperinflation between 1989 and 1990, the convertibility monetary arrangement was the “pillar” of a stabilization program intended to once and for all bring domestic prices under control in Argentina (Frenkel and Rapetti, 2). To be expected, the plan was considered quite radical. There were also concerns about the potential adverse effects stabilization might have on Argentina’s democratic transition from military rule, given that stabilization efforts in Argentina and elsewhere traditionally require dramatic reductions in fiscal spending, imperiling the popularity of democratically elected governments (Starr 1997, 85). Nevertheless, after two decades of failed efforts at stabilizing prices in Argentina, the BCRA argues that convertibility, as radical as it was, was the only tool available to bring the “scorge” (“*azote*”) of hyperinflation under control (Central Bank 2013, *El BCRA y su Historia*).

The Central Bank’s Mandate under Convertibility

Under the dictates of the Cavallo Plan, the BCRA was effectively transformed into a currency board. Frenkel and Rapetti write (Frenkel and Rapetti 2007, 3):

The legal constraints on the central bank's ability to autonomously manage the monetary base left domestic credit and liquidity almost fully dependent on the balance of payments results. Central bank reserve accumulation led to an endogenous expansion of the monetary base and the banking system credits, and fostered domestic demand. On the other hand, international reserves contractions automatically resulted in reductions of the monetary base and credit, inducing recession.

In this manner, monetary policy is taken out of the hands of the Central Bank and left to the devices of the marketplace. Starr, however, distinguishes between a true currency board system and that which was employed in Argentina. A formally instituted currency board administers domestic currency and foreign reserves. The board has no discretionary powers; it merely exchanges domestic currency for foreign currency at a fixed rate. Argentina, on the other hand, to some degree kept these responsibilities in the hands of the Central Bank and did authorize the bank to finance limited budget deficits, although bond issuance had to be denominated in foreign currency and could not exceed 20% of the domestic monetary base (Starr 1997, 87, 89).

The government, on the other hand, continued to control fiscal policy, but had no influence over monetary policy. The central bank's diminished mandate sharply curtailed the Menem administration's ability to spend beyond its means, i.e. beyond the revenue that could be generated through taxes. The administration could only engage in deficit spending to the extent that it could access financing for excess expenditure in the private sector's capital markets (Starr 1997, 88).

Impact of the Convertibility Mandate on the Macroeconomic Environment

To understand the impact of convertibility on Argentina's macroeconomic environment, it is important to recognize the context in which it was implemented. Frenkel and Rapetti highlight two important characteristics of the economic setting during the convertibility period. First, the real value of the peso had already begun to appreciate when the nominal exchange rate was pegged to the dollar. Second, given

Argentina's history of inflation, the private sector had a strong preference for dollar-denominated assets. Private savers preferred dollar-denominated deposits and banks hedged their balance sheets against exchange rate risk by lending in dollars. Beginning early in the convertibility regime, there was a trend toward a growing proportion of dollar-denominated assets and liabilities in the banking system, or de facto dollarization. The authors write (Frenkel and Rapetti 2007, 4):

The appreciated exchange rate and the partial dollarization of the local banking system were not necessary ingredients of a currency board regime. They arose from specific local circumstances, but both constituted basic characteristics of the convertibility regime and significantly influenced its performance and dramatic breakdown.

By controlling deficits, the currency board kept the domestic money supply in check. Almost immediately, inflation subsided. More importantly, the new regime instilled confidence in the private sector that the government was sincere about reigning in inflation. Starr writes, "Because a currency board serves as a guarantee of governmental commitment, it also works as an effective determinant in convincing the investors who make up the capital market to support a stabilization program and, in so doing, helps to ensure its efficacy." According to Starr, convertibility was the lynchpin of the Cavallo Plan and the source of its success. "The central objective of a currency board system," she writes, "is to confer credibility on a government's efforts to fight inflation" (Starr 1997, 88).

Frankel and Rapetti identify two ways in which convertibility impacted macroeconomic performance in Argentina. First, the combination of trade liberalization and exchange rate appreciation resulted in a chronic trade deficit, contributing to a rising current account deficit. The authors note that the trade balance only reached equilibrium or surplus under conditions of deep recession. The country thus relied on increasing capital inflows to sustain economic growth. Second, without monetary or nominal flexibility to compensate for external shocks, there was a strong correlation between the

behavior of international capital markets and domestic economic performance (Frankel and Rapetti 2007, 5-6).

Starr elaborates upon the economic costs associated with a fixed exchange-rate system. Principally, in such a system, the rate of growth in the economy is heavily dependent upon capital flows into or out of the country (Starr 1997, 94). As such, the domestic economy becomes vulnerable to disequilibria in international markets. Shifts in international interest rates, international inflation or deflation, or currency realignments will affect foreign reserves and thus impact the domestic money supply. An increase in international interest rates, for example, could force Argentina to also raise interest rates in order to prevent an outflow of foreign reserves. Similarly, a rise in the value of the dollar will force a corresponding rise in the value of the pegged currency, which without increases in export productivity, could cause significant exchange rate misalignment and hurt the competitiveness of a country's export sectors (Starr 1997, 88). Over time, a decline in exports and rise in imports due to a real appreciation in the value of a currency will also drain a country's foreign reserves. Under such circumstances, the fixed exchange rate can exert strong recessionary pressures on an economy.

In the first year of convertibility, Argentina benefited from falling interest rates in the U.S. market. Investors looking for new markets identified Argentina as both profitable and safe. The inflow of capital permitted an expansion of the domestic money supply and lower interest rates, spurring investment and economic growth. Meanwhile, the influx of foreign exchange financed a rapidly expanding current account deficit and helped the government meet its payments on foreign debt (Starr 1997, 93-94).

Argentina's vulnerability to external shocks became evident in the wake of the Mexican financial crisis in 1994, in the economic contraction following the East Asian and Russian financial crises, and in the eventual collapse of convertibility in 2001. In early 1994, the U.S. Federal Reserve began increasing short-term interest rates, slowing international capital flows and the growth of Argentina's foreign reserves. Then, devaluation of the Mexican peso led to an increase in Argentina's country risk premium and interest rates and a short recession. The economy began expanding again soon

thereafter, but in 1997, following the devaluation of the Thai baht, the process repeated itself (Frankel and Rappeti 2007, 7).

The Export Economy under Convertibility

Convertibility impacted Argentina's export sector in a number of ways, positively and negatively. First, the impact of convertibility on the peso's real exchange rate proved increasingly detrimental to Argentina's export competitiveness. Despite a dramatic reduction in Argentina's inflation rate compared to the pre-convertibility era, the inflation differential between Argentina and its trade partners nonetheless translated into a persistent real appreciation of the peso (Starr, 95). Because of convertibility, the government was unable to unilaterally devalue the peso. As Starr writes (Starr 1997, 95):

The fixed exchange rate is an essential element of the currency board system that conferred credibility on the Argentine commitment to ensure domestic price stability. Any effort to modify the exchange rate, therefore, would serve to shatter investor confidence in the Argentine economy.

As described by Calvo and Ponce (2009), the high purchasing power that the strong peso afforded Argentine consumers preserved public support for Menem's economic policies but imposed heavy costs upon import competing and export oriented industries. Overvaluation caused a decline in industrial production and investment and a spike in imported consumer goods. Argentina struggled to maintain its balance of payments and meet its debt interest payments. In 1997, as the economy entered recession, the government lacked the monetary flexibility to jumpstart economic activity (Calvo and Ponce 2009, 8-9). Contrary to previous administrations, however, the Menem administration cut federal spending and allowed the economy to contract (Starr 1997, 98).

Despite the overvalued exchange rate, Steinberg argues that agricultural exporters favored convertibility because they valued exchange rate and monetary predictability. Macroeconomic stability enabled expansion of land use and encouraged foreign investment that led to improvements in productivity. Moreover, producers who relied on

imported inputs calculated that devaluation could provide limited gains (Steinberg 2008, 25).

Compensation policies helped to preempt opposition to convertibility from the export sector. Steinberg cites Etchemendy, who writes (Steinberg 2008, 26, citing Etchemendy 2003, 34-35):

The endurance of the currency board that sparked the crises cannot be understood without considering this matrix of payoffs that set aside the most powerful sectors in labor and industry affected by the exchange rate level. The policies of compensations in labor and industry are the complementary side of macroeconomic policy in Argentina during the 1990s.

To the extent that the agricultural sector was harmed by the peso's real appreciation, the sector benefited from liberal trade policies. Starr argues that convertibility also created incentives for the Menem administration to provide direct support to export industries. In order to preserve parity between the dollar and the peso, the administration either had to limit the growth of the monetary base (and restrict economic growth in the process), or increase the Central Bank's supply of reserves. The latter goal could be achieved by encouraging foreign direct investment and by liberalizing trade (Starr 1997, 90).

Increasing productivity thus became a key component of Menem's economic strategy. The government encouraged expansion of credit (primarily from international sources) to promote investment and attempted to direct this investment toward the export sector. It increased market opportunities for exporters through liberalization, most notably through the formation of MERCOSUR. Between 1992 and 1994, 75% of Argentina's export expansion went to MERCOSUR countries, driven largely by a boom in Brazilian demand following a real appreciation of the Brazilian currency. Yet, Starr writes that despite exceptional levels of investment, very little of Argentina's growth could be attributed to increased investment or productivity in the export sector *per se*. But as previously mentioned, the majority of new investment went toward non-tradable goods (Starr 1997, 96).

Starr sums up convertibility's dilemma succinctly. She writes that an overvalued exchange rate (Starr 1997, 99):

will force Argentines to accept slower growth if the country is to preserve a manageable trade balance. Slow growth, however, will delay the recovery of those standards of living which were sacrificed to the stabilization effort, and it will perpetuate the shortage of public funds needed to stimulate the creation of jobs and to attend to the nation's crumbling public services.

In other words, she continues, "The survival of the Cavallo Plan will depend directly on the ability of the Menem government to withstand the political consequences of slow growth, high unemployment, and the potential for periodic recessions that are largely the product of international market forces." Starr warns that the lack of growth could potentially break a coalition united only by its support of the stabilization effort (Starr 1997, 99). As things played out, however, despite Menem's willingness to accept slower growth, the convertibility regime could not withstand growing levels of debt and ultimately a crisis of confidence in international markets.

Post-Devaluation: A New Monetary Policy

Following the end of Menem's term in 1999, the administration of newly elected President Fernando de la Rúa went to great lengths to ensure the survival of the convertibility regime. The government imposed strict controls on capital movements and bank withdrawals, aiming to keep banks solvent, adhere to the convertibility law's monetary guidelines, withstand the demand for foreign currency, maintain reserves, and prevent devaluation and default (Frenkel and Rapetti 2007, 8). Finally, after a series of presidential resignations, the *Ley de Emergencia Económica de 2002* (Economic Emergency Act of 2002) brought convertibility to an end.

Initially the government tried to replace convertibility with a dual exchange rate, offering an official price for trade and financial operations fixed at 1.4 pesos/dollar and a floating rate price for the rest of foreign exchange operations. The IMF objected, however, and the government yielded and allowed the peso to float. Within a few

months the exchange rate reached four pesos to the dollar. Local prices registered a 21% increase in the consumer price index. Real wages fell almost 18%, leading to a contraction of aggregate demand (Frenkel and Rapetti 2007, 9).

Calvo and Ponce note the consequent redistributive effects of the transition to the new monetary regime. Lenders, debtors, workers, and producers had their assets converted to pesos at different rates. For example, while dollar-denominated debt was rewritten following devaluation, wages were not. In general, wage adjustment lagged behind prices for other factors of production. This meant a dramatic drop in labor costs, but also a retraction in domestic consumption (Calvo and Ponce 2009, 9-10).

Nonetheless, the contractionary effect of the devaluation was small and short-lived (Frenkel and Rapetti 2007, 9). At the expense of real wages, the government maintained a depreciated currency in order to increase output and employment. Calvo and Ponce write, “The politics of currency depreciation quickly imposed a new logic for the production and commercialization of goods, more reliant on low labor costs, with companies enjoying a significant competitive edge abroad and significant protection at home.” Following the depreciation, “rural producers quickly reasserted themselves as the main beneficiaries of the new economic environment.” Exporters of soy and its byproducts, in particular, experienced a windfall of profits as commodity prices increased and domestic wages stalled (Calvo and Ponce 2009, 12).

In August 2003, Argentina’s Congress reformed the legal structure of the Central Bank. While convertibility no longer applied, the BCRA maintained a large degree of independence. The bank’s primary function remained the preservation of the national currency’s value. In implementing its monetary and financial policy, the BCRA was to be free from directives from the Executive National power. The bank was expected to publish annual inflation targets and the projected evolution of money flows. If at any point, quarterly or otherwise, the bank anticipated a deviation from the inflation target, it was to publish an explanation as well as its plan for correcting the situation. The post-convertibility system resembled a typical inflation-targeting regime. Wiesner notes, however, that the question of whether there is inflation targeting is a complex one, as it

“is not fully clear how much of an integrated analytical and operational framework there is to make monetary, fiscal and exchange rate mutually consistent” (Wiesner, 109).

As will be discussed in Chapter Six, the BCRA did not remain apolitical. Far from keeping government out of central banking, President Néstor Kirchner very adroitly exploited the undervalued peso to take advantage of a propitious boom in international commodities prices. He used windfall profits in the agricultural sector to finance price supports for wage goods. Richardson refers to this strategy as a form of export populism. The BCRA was integral to the success of this framework. The bank intervened heavily in foreign exchange markets to prevent the peso from appreciating. Between 2003 and 2009, as the Brazilian real and other global currencies appreciated against the dollar, the peso steadily lost value. According to Richardson, during Kirchner’s term in office, the central bank purchased nearly \$45 billion from foreign exchange receipts (Richardson 2008, 239). So it seems that the central bank’s mandate has been slowly expanding since the devaluation. The 2012 reforms to the charter mark a culmination to this process.

The New Charter: Returning to the Original Mandate

The defining feature of convertibility was its rigid governance of monetary policy. The law prevented the central bank from conducting autonomous management of the monetary base. Domestic credit and liquidity were endogenously determined by the balance of payments, while international interest rates and the country risk premium established a floor on the domestic interest rate (Frenkel and Rapetti 2007, 8). The regime represented what Epstein calls the “best practice” approach to central banking, which consisted of central bank independence, inflation targeting, and the use of indirect methods of monetary policy. (Epstein, 2006, 1) This limited mandate, Epstein argues, often comes at the expense of broader goals such as employment creation, financial stability, and economic growth (Epstein 2012, 1).

On April 6, 2012, by passing Law 26.739, Congress introduced a series of reforms to the BCRA’s Carta Orgánica, or Founding Charter. The reform institutes a

“triple mandate” that includes monetary stability, financial stability, and economic development linked to employment creation and income equality. The law establishes new instruments of monetary and credit policy, authorizes the bank to use international reserves to pay off foreign debt obligations, and establishes channels for “productive” investment. The BCRA adopts the view that money is endogenous. In other words, expansion of the money supply is appropriate and is compatible with monetary stability to the extent that it comports with the managed float policy, increases credit to the private sector, and allows the BCRA to perform its function of financing the treasury (Banco Central, *Programación 2013*, 5). Epstein stresses that the new mandate corresponds with the historical practices of central banks in developed countries, which integrate central banking into the overall government framework of macroeconomic policymaking (Epstein, 1-2).

Embracing a managed float, Law 26.739 creates several mechanisms for monetary policymaking in Argentina. First, it eliminates the fixed relationship between the monetary base and the bank’s international reserves, linking foreign exchange requirements instead to the current account balance. This measure gives the BCRA increased latitude to intervene in Argentina’s credit markets and is meant as a tool for the bank to maintain the health of the financial system, spur real economic growth and ensure that credit is available and affordable for productive investment. In abandoning the fixed exchange rate, the new law also affirms the bank’s ability to define parity between the peso and the dollar (Banco Central 2013, *Carta Orgánica*). The new law assumes the fixed relationship between the monetary base and international reserves is no longer relevant. Rather, the bank argues that reserve requirements should correspond to its ability to manage the balance of payments. The bank thus assumes responsibility for containing excess volatility in exchange rate parity and managing foreign reserves (Banco Central 2013, *Programación 2013*, 4).

Second, under Article 20, the charter allows the BCRA to lend directly to the government up to 12% of the monetary base and advance funds corresponding to 10% of government revenue from the previous 12 months (Epstein, 2012, 1-2). The bank is

charged with providing financial support to Argentina's banking system in the event that the banks encounter short-term (or transitory) shortages of liquidity. Such decisions, the bank formally argues, requires greater cooperation between the Office of the Superintendent of Financial and Exchange Entities (*Superintendencia de Entidades Financieras y Cambiarias*), the bank's board of directors (*directorio*), and the office of the bank's president, and should be taken under the authority of the president and the board of the directors. The charter calls for coordination and harmony ("*sintonía*") between credit, exchange, and monetary policies (Banco Central 2013, *Carta Orgánica*).

Third and, according to Epstein most importantly, the bank may provide funds for domestic banks and other financial institutions to finance long-term productive investment (Epstein 2012, 1-2). With this charge, the charter embraces the BCRA's role as an agent of economic development. It expands the bank's mandate beyond what Epstein calls macroeconomic issues, such as maintaining currency stability and controlling inflation, to include credit allocation and the use of direct controls to support economic sectors. Such policies, Epstein argues, should be seen as:

mechanisms of 'industrial policy', an attempt by the central bank to build up a 'targeted' sector of the economy, not *only* to deliver benefits to their friends and political allies, or to provide 'macro stability', but *also* because they are considered an important, dynamic sector for the economy as a whole.

Significantly, Epstein continues, "the whole tenor or economic development can be fundamentally affected by which of these industries the central bank and associated institutions [promotes]." Central banks that are more closely integrated with government are likely to promote policies and procedures that are framed by government priorities and reigning ideologies (Epstein 2006, 4, 6).

According to a BCRA statement regarding the bank's new mandate, the charter restores the bank's original mandate, which governed the bank's behavior from its inception in 1935 until 1992. The mandate's restoration, defined under article 3, not only reestablishes principles of monetary stability and the stability of the financial system, but also calls for full employment of resources and socially equitable economic development

(Banco Central 2013, *Programación 2013*). According the bank's website, the measure "represents a milestone in the institutional organization of Argentina's political economy" (Banco Central 2013, *Carta Orgánica*).

Predicting the Potential Impact of the New Mandate on the Agricultural Sector

Similar to Frieden, Epstein calls attention to a distributive function in central bank policy. He writes, "Central banks' policies can have differential impacts on different classes and groups: workers and capitalists, debtors and creditors, finance and industry, those operating in traded and non-traded goods" (Epstein, 2006, 6). Independent of trade, the money supply and distribution favors certain sectors over others through its impact on the distribution of prices in an economy, begging the question of how Argentina's new central bank charter will affect the distributional impact of monetary and exchange rate policy, and by extension, how it will impact the agricultural sector.

I predict that the BCRA's new mandate will impact the agricultural sector in three ways. First, we should expect to see greater allocation of credit to targeted sectors. The sectors that benefit will be determined by the government's development agenda, which will likely shift resources from the agricultural sector to support oil and gas and manufactured goods or subsidize price controls and social welfare programs. Second, inasmuch as the mandate facilitates deficit spending through increased lending to the Treasury, there is a reasonable expectation that the charter will introduce new inflationary pressures into Argentina's domestic economy. As we will see in Chapter Six, spending tends to mirror the electoral calendar, portending potential deficits in the run-up to future elections, including perhaps this year's mid-term elections in October. Unless there is a concomitant adjustment to the nominal exchange rate, this will cause real appreciation of the peso and hurt agricultural competitiveness. Third, with greater flexibility in the use of foreign reserves, we may see the government exert greater pressure on the agricultural sector to replenish reserves.

Monetary Expansion: Countercyclical Monetary Policy and Credit Allocation

The BCRA's ability to monetize the economy serves a number of purposes, two of which are outlined here. First, control over the money supply allows the Central Bank to exert influence over the pace of economic growth. During periods of economic downturn or contraction of economic output, the bank may expand the monetary supply to stimulate economic growth. Conversely, during periods of expansion, the bank may choose to reduce the money supply to keep the economy from overheating. Control over the money supply permits the bank to use countercyclical fiscal policy to stabilize economic output.

Second, monetary expansion can reduce the cost of credit and stimulate lending. Credit expansion may be part of a countercyclical strategy to induce economic growth, but may also serve as a tool to target specific economic sectors. For example, the BCRA's 2013 program promises to provide financial incentives, such as reduced capital reserve requirements, to financial institutions that lend to small and medium-sized enterprises. The BCRA also plans to target marginalized regions, enforcing higher reserve requirements for banks investing in urban centers and areas with higher levels of economic and financial sector development. Finally, the BCRA is incentivizing the provision of a number of credit lines for productive investment. For example, 5% of private-sector peso-denominated deposits at major financial institutions must be invested in capital goods purchases or production facilities. The BCRA sets maximum interest rates and minimum amortization periods for such investments. A Bicentennial Program for Productive Financing (*Programa de Financiamiento Productivo del Bicentenario*) (PFPB) further establishes new assets that can be used as guarantees for loans to the banking sector (Banco Central 2013, *Programación 2013*, 26).

How credit expansion affects the agricultural sector depends on how credit is allocated. Auguste, et al., explain that the sector is highly intensive in physical capital (with a significantly higher capital-to-output ratio than manufacturing) and displays high total factor productivity growth relative to other sectors, characteristics commonly associated with large demand for external funding. A significant share of increases in

agricultural productivity may be attributed to improvements in irrigation systems and the use of fertilizers and machinery. Together, this evidence suggests that much of the dynamism of the primary agricultural sector is, as Auguste, et al., write, “rooted in a quest for increased productivity through heavy investments in intermediate inputs, research and development, and, to a lesser extent, physical capital, all of which call for fluid access to external and internal financing” (Auguste, et al., 2013, 15-16).

So it appears that any of several scenarios could play out. It is possible that easier government access to Central Bank financing could channel public-sector investment into the agricultural sector. Stads, et al., note that in 2007, the Argentinean Secretary for Science, Technology, and Innovation of Production was upgraded to ministerial status, with the intention of positioning Argentina in the high-value added segment of the global economy (Stads, et al., 2010, 2). The study conducted by Stads, et al., identified 74 public sector agencies involved in agricultural research in Argentina in 2006. The study found that after a dip in investment during the economic crisis, agricultural research and development spending recovered under the Néstor Kirchner administration. Expenditures at the National Institute of Agricultural Technology (*Instituto Nacional de Tecnología Agropecuaria*, or INTA), for example, increased from \$141 million USD in 2004 to \$263 million USD in 2006. That year, Argentina invested \$1.27 USD on agricultural research and development (R&D) for every \$100 USD of agricultural output, an intensity ratio higher than the Latin American average but outpaced by Uruguay and Brazil (Stads 2008, 2-3).

Nonetheless, the current system for allocating money to INTA, put in place by President Kirchner, suggests that increased access to credit will not impact public sector spending on agricultural R&D. Whereas President Menem placed INTA funding under the discretion of the Ministry of Agriculture, President Kirchner gave the institute financial autonomy. As of 2010, INTA automatically receives .35% of Argentina’s total agricultural and non-agricultural imports and a small share of exports (Stads, et al., 2010, 7).

More generally, by international standards, national public expenditure in Argentina's agricultural sector, which includes research and extension, sanitary and phytosanitary control, seed quality, and private sector tax incentives and price supports, is extremely low as a share of total expenditure. Figure 4.1 shows that this share fell at the end of the 1990s, which makes sense given limited budgetary resources during that time, but rose again from .5% in 2002 to .8% in 2005 (Akroyd and Smith 2007, 67-69).

	National	Agriculture*		
	AR\$ (m)	AR\$ (m)	% of national exp.	% of agric. GDP
1998	47,531	516	1.09%	3.4%
1999	50,046	473	0.95%	3.9%
2000	49,720	449	0.90%	3.5%
2001	48,903	384	0.79%	3.3%
2002	46,980	254	0.54%	0.8%
2003	58,867	348	0.59%	0.9%
2004	64,828	465	0.72%	1.1%
2005	77,978	613	0.79%	1.4%

Figure 4.1: Composition of public expenditure, 1998-2005 (million current AR\$) (Akroyd and Smith 2007, 67).

Akroyd and Smith stress that agricultural expenditure in Argentina is highly decentralized. Most expenditure occurs through a series of semi-autonomous government agencies and is shared more or less equally between the national government and the provincial and municipal governments (Akroyd and Smith 2007, 10, 67). Given these patterns, it seems more likely that increased monetary autonomy in Argentina will divert credit from the agricultural sector rather than contributing to it financially. The inflationary consequences of increased credit supply, moreover, could also create uncertainty and deter sources of international financing.

Urbiztondo, et al., predict that policymakers' increasing disinterest in the sector makes it unlikely that government credit incentives will benefit the agricultural sector. Legal institutions created to organize agro-industrial markets in the mid-1960s have not been modernized and the sector has lost influence at both the federal and provincial level. Making matters worse, Argentina's policy environment is discouraging private-sector investment. Macroeconomic policy has pushed technology adoption toward low capital-intensive investments by producers. Furthermore, the private sector has responded to

distortionary policy incentives by resorting to flexible contractual arrangements with machinery contractors, tenants, and capital investors (Urbiztondo, et al., 2009, 48).

Central Bank Independence and Inflation

According to Epstein, central bank independence implies that a central bank is not subject to pressure from the government to finance government activities. In theory, independence allows a central bank to focus on inflation, rather than on public policy concerns such as employment, industrial policy, or credit allocation. It also means that a central bank should not try to manage exchange rates through monetary policy or capital controls. Rather, the exchange rate becomes a function of balance of payments and capital flows (Epstein, 2006, 3). As the BCRA takes on the expanded mandate, it will be interesting to see to what extent the bank feels pressure from the government to finance deficits and spend foreign reserves, and whether concerns such as employment, economic growth, and social equity conflict with macroeconomic objectives of price stability.

The BCRA discloses a Monetary Program before the beginning of each calendar year as part of its policy implementation. The program communicates objectives and intentions with respect to the development of monetary, financial, credit, and exchange rate policies. Among these policies, the program explains inflation targets and the projected total change in money stock. Ultimately, the bank aims to achieve balance between money supply, money demand, and price stability (Central Bank 2013, *Objectives and Monetary Program*).

The bank takes the view that monetary supply is not the source of inflation in Argentina. According to the BCRA, inflation is a function of imbalances in Argentina's productive sectors, bottlenecks, struggles over wealth distribution, oligopolistic price formation, and exogenous shocks originating from international prices (Banco Central 2013, *Programación 2013*, 4). The BCRA's position is that its mandate to promote economic development will help Argentina overcome these sectoral bottlenecks that exert pressure on prices. The bank thus does not treat monetary stability in isolation or as merely an inflation target because, it claims, contractive monetary policies or strong

nominal exchange rate appreciations do not address the underlying causes of inflation. Rather, the bank treats stability according to a broader definition that incorporates the possibility of economic growth and increasing value added (Banco Central, *Programación 2013*, 3-4).

The agricultural sector, on the other hand, sees a correlation between the BCRA's activities and rising inflation. The sector finds the inflationary consequences of the new mandate are troubling. Not only do higher rates of inflation cause a real appreciation of the peso, but the increase in monetary discretion may introduce uncertainty into the monetary system. As we will see in Chapter 6, the agricultural sector is vocal in its opposition to high inflation.

The administration of Cristina Fernández de Kirchner staunchly defends its monetary policies, but it is difficult to obtain accurate inflation estimates. Argentina's National Institute of Statistics and Census (*Instituto Nacional de Estadística y Censos*) (INDEC) maintains that between 2007 and 2011 prices rose between 5% and 11% (*The Economist* 2012, "Don't Lie to Me"), and that inflation stayed steady around 10% in 2012 (*La Nación* 2013). But the government has strong incentives to keep the officially-recognized inflation rate low. Low inflation cheapens the price of government-issued debt (*The Economist* cites estimates that doctoring the number has saved the government \$2.5 billion USD in payments on index-linked debt) (*The Economist* 2013, "Motion of Censure").

In a piece written for the daily newspaper *El Cronista*, Lacunza also suggests that manipulating the inflation index is a means of increasing government coffers, noting that fiscal transfers to the provinces are adjusted for inflation. Lower inflation means that provincial coffers must suffer the inflated costs of salaries and expenditures, while receiving none of the additional tax revenue generated from the persistent increase in prices (Lacunza 2012). Chapter Five highlights fiscal transfers from the federal to the provincial governments as a key component of both total budgetary spending and the policymaking process.

Suffice it to say, government-reported figures have been sharply rebuked by domestic and international organizations alike. *The Economist* suspects that true inflation is double INDEC's estimates and so since February 2012 no longer uses official INDEC indices in its weekly inflation reports. Instead the magazine opts to rely on the calculations of PriceStats, an independent financial services firm (*The Economist* 2012, "Don't Lie to Me"). Inter-governmental organizations likewise have chastised the Fernández de Kirchner administration. In February of this year, the IMF officially reprimanded Argentina and gave the government until the end of September to comply with the Fund's rules on reporting statistics (*The Economist* 2013, "Motion of Censure").

The evidence of manipulation of the inflation index is difficult to refute. Several organizations have begun compiling their own figures, much to the government's chagrin. One index that has gained traction is the *IPC Congreso*, used by major newspapers *Clarín* and *La Nación*. Figure 4.2 demonstrates the massive disparity between INDEC and *IPC Congreso* inflation estimates since the beginning of 2011.



Figure 4.2: Comparison of official (INDEC) and unofficial (Congreso) monthly inflation estimates, January 2011-May 2013 (La Nación 2013, "Inflación y precios").

While refraining from yet drawing conclusions about a causal relationship between the new mandate, the monetary supply, and inflation, I do offer the following figure for consideration. Figure 4.3 shows the increase in the M1 and M2 money supply in relation to foreign exchange reserves. It appears that the pace of monetary expansion has increased under the administration of President Fernández de Kirchner, particularly since the beginning of 2010, when Mercedes Marcó del Pont replaced Martín Redrado as president of the Central Bank. The members of the Mesa de Enlace might look to this trend as evidence of a relationship between central banking philosophy and macroeconomic instability.

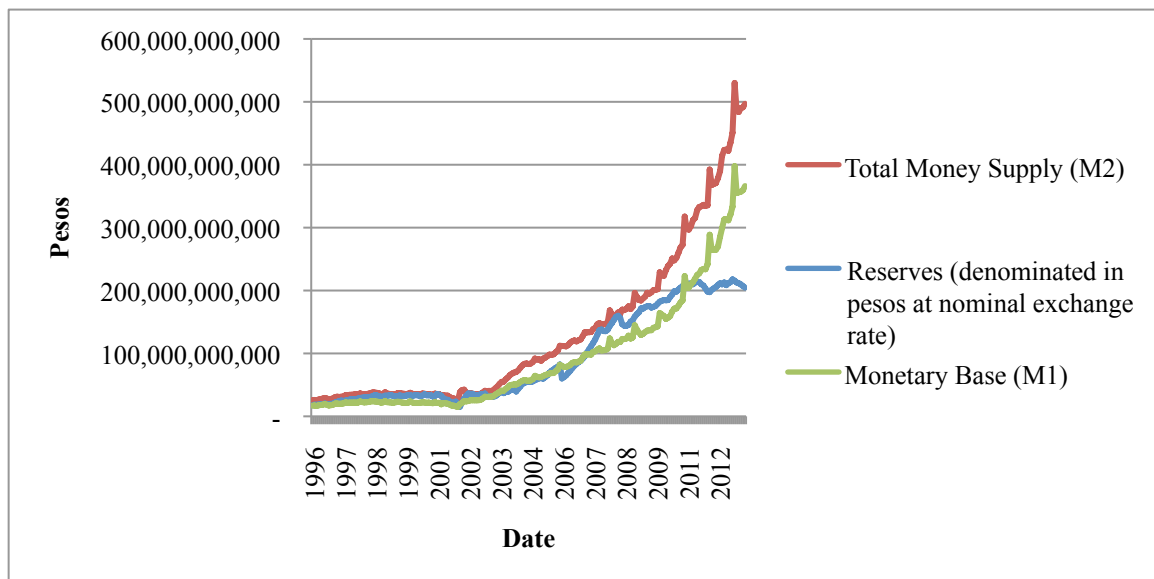


Figure 4.3: Total money supply (M1 and M2) and foreign exchange reserves, January 1996-May 2013 (BCRA 2013, Estadística).

As prices increase, Argentines are increasingly looking to shed pesos in favor of hard assets and dollars. The rush to dollars has amped up pressure on government foreign exchange reserves. The government, which needs a strong peso in order to purchase dollars from exporters at a cheap price, has responded by imposing strict controls on access to dollars. Just five days after the reelection of President Fernández de Kirchner in October 2011, Argentina's federal tax agency, the Federal Administration of

Public Income, assumed responsibility for authorizing all dollar purchases in what has become known as the *cepo cambiario*, or currency exchange control. As a result, a parallel currency market has emerged through which Argentines commonly purchase dollars, known as “blue dollars” at a black market rate. As of this writing, the blue dollar is selling for 9.04 pesos (*La Nación* 2013, “Dólar oficial y dólar blue hoy”).

Management of Foreign Exchange Reserves and Currency Market Intervention

As credit expands and the risk of inflation grows, domestic and international confidence in the new monetary regime will largely depend on Argentina’s continued ability to maintain sufficient foreign currency reserves. Relaxed restrictions on the use of foreign reserves create a strong incentive to spend them. After all, foreign exchange accumulation entails high fiscal opportunity costs, particularly in countries with high domestic interest rates on alternative investments. Reserve accumulation, while a means of mitigating risk, in a sense destroys the rationale behind capital inflows, which is to move resources into the economy (Ocampo 2012, 14-15).

Indeed, the current BCRA leadership explicitly recognizes the benefits of reserve accumulation as protection against instability in international markets. Reserves reduce the probability of financial crisis, lower the cost of debt, and increase the capacity to respond to external events that may induce an abrupt reversal of international capital flows (Banco Central 2013, *Programación 2013*, 15).

Since the end of convertibility, Argentina has accumulated foreign reserves primarily via trade surpluses. Between 2003 and 2012, international reserves increased by more than \$32 billion USD, reaching a high of over \$52 billion USD in 2011, at the same time that Argentina paid off \$33 billion USD in sovereign debt (Banco Central 2013, *Programación 2013*, 16). As demonstrated in Figure 4.4, however, the reserve stock has begun to taper off.

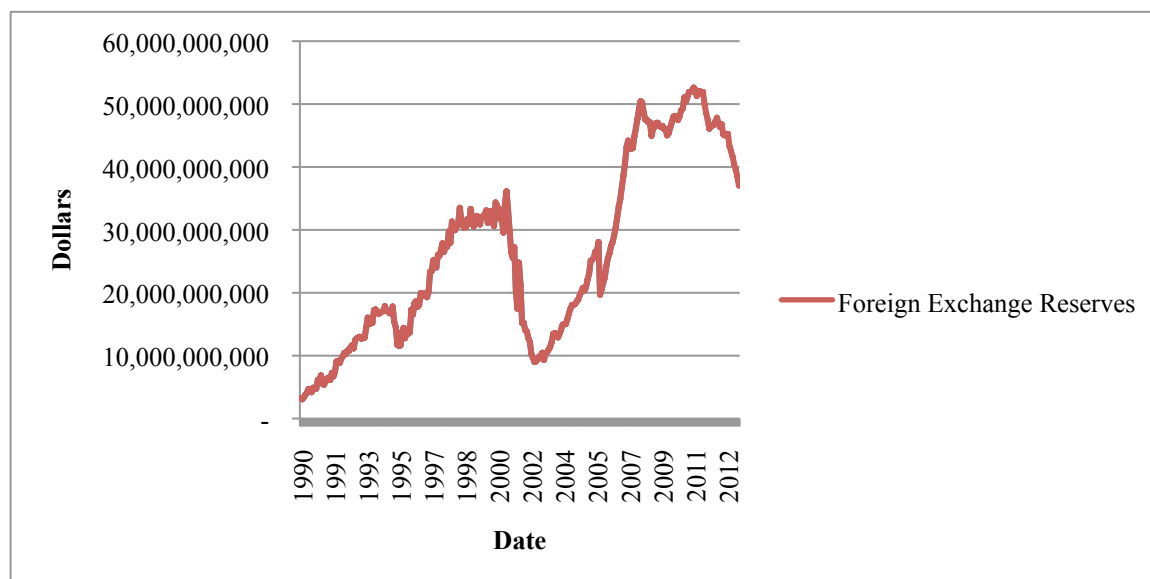


Figure 4.4: International reserves in gold, foreign exchange, placements, and other, January 1990-May 2013 (BCRA 2013, Estadísticas e Indicadores).

It is difficult to predict with precision how foreign exchange reserves will increase or decrease over time or in response to policy measures. The relationship between agricultural exports and foreign reserves, for example, is dynamic. As exports increases, foreign revenue should increase, but so will reserves needed to import additional inputs for added production. At the same time, increased demand for Argentine goods can renew upward pressure on the peso. A stronger peso could in turn encourage greater imports, which in the long run again will deplete reserves. Each of these factors is influenced by changing global commodities prices. Under such scenarios, it is easy to overestimate the foreign reserves to be gained from increased agricultural output (Sturzenegger 1991, 29)

To prevent undesirable effects, the Central Bank actively intervenes in currency markets by purchasing U.S. dollars. The bank issues inflation-indexed bonds to pay for these dollars. According to the BCRA's 2013 Program, the bank plans to purchase \$12.5 billion in foreign currency in 2013, which will allow it to replenish its foreign reserves once foreign-currency denominated debt in the public sector has been paid off (Banco

Central 2013, *Programación 2013*, 15). In this sense, the government has a strong interest in containing inflation because it impacts the inflation-indexed value of bonds.

Conclusion

As discussed, there is some uncertainty about the long-term sustainability of the new central bank mandate in Argentina, particularly to the extent that it relies on a continuing income of foreign exchange. A decline in revenue from commodities exports can mean a reduction in foreign exchange earnings and revenue derived from export taxes. In the longer term, such reductions could alter the ratio of reserves to Argentina's monetary supply, which could hurt confidence in the peso and in the Argentine economy. For now, the BCRA anticipates that global commodities prices will remain high, although it does expect some decline in grains prices as adverse climatic conditions in South America like those experienced in 2012 subside. Monetary policymakers also hope for a 20% boost in agricultural production, driven by increases in volumes of corn and soy (Banco Central, *Programación 2013*, 8-9). The soy-based positive trade balance is thus a far cry from 1990s deficits financed by external debt, which may grant the monetary authority more flexibility in monetary operations and foreign reserve management.

In the wake of the global financial crisis, the expanded mandate of the BCRA is not unique. The world's advanced economies have heavily relied on monetary policy as a countercyclical strategy for reenergizing global credit markets. Fears about the impact excess international liquidity might have on the value of the peso are indicative of a more general concern about how capital is entering the country and how it is put to use. Institutional memory of the massive capital flight that preceded the peso's devaluation in 2002 remains strong. The BCRA is thus committed to keeping capital inside the country and creating channels to ensure investment (local and foreign) reaches productive sectors. In this sense, it is not surprising that the BCRA is taking a more active role in allocating credit.

Perhaps the greatest risk to the sustainability of the monetary regime is politicization of the monetary authority. With diminished independence from political

forces, the bank may be tempted to pursue certain components of its mandate, such as growth and redistribution, at the expense of price stability and macroeconomic stability. The next chapter looks at policymaking channels in Argentina and how actors may or may not influence Central Bank behavior.

Chapter 5: Policymaking in Argentina and Channels for Articulating Monetary Policy Interest

Introduction

The process of expanding the BCRA's mandate has not gone uncontested. As alluded to in the previous chapter, in 2010 President Cristina Fernández de Kirchner's attempt to free up foreign currency reserves to pay off national debt culminated in a standoff with the president of the BCRA, Martín Redrado. Redrado lost this confrontation and ultimately resigned. The appointment of his predecessor, Mercedes Marcó del Pont, marked a turning point in central banking mantra in Argentina. Marcó del Pont, formerly head of the state-owned bank, Banco Nacional, strongly favors greater government access to the country's foreign reserves. As much as this episode represents a changing of the guard in Argentine central banking, it is also indicative of the forces at play in the policymaking process and how these forces can affect monetary policymaking and Central Bank independence and behavior.

Fernández de Kirchner's actions in dismissing Redrado point to the power of the executive branch in many if not all facets of the Argentine policymaking process. Although constitutionally enshrined, executive power in Argentina is also the *de facto* result of the weakness of the other branches of government and of the federal bureaucracy. Executive power contributes to other prevailing incentive structures that favor short-term, opportunistic, and non-cooperative decision-making that should play a large role in determining the Mesa de Enlace's relationship with the BCRA mandate.

In addition to a strong executive branch, Spiller and Tommasi write that the two defining features of Argentina's policymaking process are, on the one hand, control by governors over provincial representatives in Congress and, on the other hand, the system of fiscal transfers between the federal and provincial governments. These two forces "are the backbone of a symbiotic criss-crossing of national and provincial politics and policies" (Spiller and Tommasi n.d., 14-15). The incentives entrenched in these

institutional arrangements favor fiscal and macroeconomic behavior that will not likely be favorable to agricultural interests. This chapter looks at Argentina's policymaking process and the channels of influence available to interest groups, in order to understand the development of informal channels through which the sector generally articulates its interest.

There is limited dialogue between the Mesa de Enlace and the Fernández de Kirchner administration. Where formal channels are lacking or biased against agricultural interests, these groups are prone to strike, withhold output, or literally take to the streets to influence policy. At the same time, a significant portion of the sector's influence is determined by how actors such as the Mesa de Enlace are able to frame issues for the general public and acquire legitimacy and broad support for their positions.

Central Bank Decision-Making: Executive Delegation of Monetary Authority

President Cristina Fernandez de Kirchner's January 2010 decree dismissing the president of the BCRA, Martín Redrado, over a dispute concerning the use of Argentina's foreign currency reserves tested the bounds of executive authority over Central Bank policy and gave some indication of the politicization of the bank. Redrado initially refused to leave his post and challenged the dismissal in court, winning reinstatement before ultimately stepping down on January 30 as a second presidential decree sat before Argentina's Congress awaiting approval.

Following Redrado's resignation, the *Buenos Aires Herald*, an English language newspaper, cited criticism by Redrado that Fernández de Kirchner had stepped on and overrun the Central Bank (*Buenos Aires Herald* 2010, "Redrado Calls It Quites"). Fernández de Kirchner had gone so far as to assign a police unit to prevent Redrado from entering the bank. Meanwhile, the president appointed a member of her Front for Victory Party, Mercedes Marcó del Pont, former Congresswoman and president of the state-owned Banco de la Nación, to replace Redrado (Barrionuevo 2010). Marcó del Pont's appointment as Redrado's replacement suggests significant influence from the executive branch over the workings of the bank, albeit within certain legislative confines.

According to Lemos and Llanos (2006), the BCRA is governed by a board of directors comprised of a president, vice-president, and eight directors appointed by the president and confirmed by Argentina's Senate. Half of the body is renewed every three years. Members have six-year mandates and can be reelected indefinitely (Lemos and Llanos 2006, 13). The nomination process for bank leadership and its board of directors takes place in the Senate's Agreements Committee (*Comisión de Acuerdos*). The Agreements Committee is a centralized body responsible for all federal confirmations and is widely considered to be one of the Senate's most powerful committees.

The nomination process is public and subject to objection from members of civil society. Senate confirmation of presidential nominees is not automatic and is at times contentious. Lemos and Llanos suggest that an accommodation process takes place. The executive branch anticipates the possibility of veto and nominates a candidate who is acceptable to a Senate majority, regardless of whether government is divided, coalitional, or a majority government. When all is said and done, Lemos and Llanos found a 94% confirmation rate of all federal nominees between 1989 and 2001. Of 4,115 nominations during that time, four were rejected outright and 227 withdrawn (Lemos and Llanos 2006, 25).

The executive branch may also remove members of the bank's board of directors from their post under Article 9 of the original Central Bank charter (signed into law October 22, 1992), on grounds of misconduct or failure to perform one's duties. Removal requires the consent of a Congressional committee presided over by the president of the Senate and comprised of the heads of the budgetary, housing, and finance committees of both the Senate and the Chamber of Deputies (Founding Law 1992). In Redrado's case, Fernández de Kirchner attempted to dismiss him by decree. A federal court overruled her dismissal action, pending approval from Congress.

Laws governing confirmation and removal of central bankers lend the impression of some degree of insulation of monetary and exchange policy from executive branch interference. But Rose-Ackerman, et al., argue that this is in fact not the case. In practice, the government has ignored the Central Bank's independent status, the Senate

confirmation requirement, and the fixed six-year term. Only twice has a Central Bank president stayed on after a change in administration, and no Central Bank president has completed a full six-year term. In a powerful indictment of the politicization of the BCRA, Rose-Ackerman, et al, write (Rose-Ackerman, et al., 2010, 38):

The President expects that members of Central Bank's board, and especially its Chief, will align their policy views with those of the executive. The board members often resign when the executive requests or requires it of them, and it is unusual for a board member to resist resignation as the Chief of the Central Bank did when President Kirchner tried to oust him through a DNU in early 2010. Further, when the Central Bank's President resigns, it is not unusual for the executive to make a temporary appointment, who then remains in office without Senate confirmation.

To understand Central Bank operations, it becomes necessary to understand executive authority in Argentina and how the executive branch interacts with other policymaking institutions.

The Policymaking Process in Argentina and Its Effects Upon Monetary Policy

It stands to reason that if political actors want to influence the BCRA through formal channels, they will do so through the executive branch. The following sections examine the construction of executive coalitions, their interactions with the legislative branch and federal bureaucracy, the role of political parties within the executive branch, and the relationship between the federal and provincial governments. The question at hand is how these interactions dictate monetary policymaking and affect political influence in the Central Bank, and how the agricultural sector navigates this process.

Executive Power and Party Politics

A powerful executive branch is a defining feature of policymaking in Argentina. According to Urbiztondo, et al., policy actors in Argentina typically target the executive branch when “venue shopping” for influence. The Ministries of Economy and Labor are

primary entry points, and appointments to key ministerial positions are generally the most effective strategy for influencing the policymaking process.

Outside of ministerial appointments, channels of influence are not highly institutionalized, as most types of lobbying are not closely regulated (Urbiztondo 2009, et al., 11). Presidents frequently resort to Decrees of Necessity and Urgency (*decretos de necesidad y urgencia*) (DNUs). Once approved by a Permanent Bicameral Committee in Congress, these decrees carry the force of law and, in Johnson's opinion, weaken Congress's ability to check the executive (Johnson 2008, 84). Rose-Ackerman, et al., refer to the DNU as a "tool that is uniquely tailored to circumvent constitutional prohibitions on lawmaking by the executive branch" (Rose-Ackerman 2010, 14).

Although a DNU legally may only be issued under extraordinary circumstances and requires unanimous approval from the president's cabinet and majority approval from both houses of Congress, Rose-Ackerman, et al., note several reasons why DNUs are a robust source of presidential power. First, both houses of Congress must agree to reject a DNU. Second, there are no time limits for Congressional action; a DNU stays in effect unless Congress acts to accept or reject the measure. Third, legislative rejection cannot affect so-called "vested rights," meaning that Congress cannot, for example, overturn short-lived (but potentially far-reaching) effects of a DNU. Finally, DNUs have no sunset clause; emergency decrees may stay in force even once an emergency has passed (Rose-Ackerman 2010, 14-15).

These guidelines for issuing emergency decrees not only embolden the executive branch but point to statutory constraints on the legislative branch that extend beyond the DNU. Argentina's Congress faces a deficit of legitimacy. Short terms in office and low reelection rates in Congress deprive the legislative institution of political expertise and continuity. Spiller and Tommasi note that of all the deputies that served between 1983 and 2001, 85% served one term (Spiller and Tommasi n.d., 16-17).

Members of Congress, moreover, are generally accountable first and foremost to provincial party elites, a phenomenon which is discussed in greater detail below. This provincial loyalty, however, stems from a second defining characteristic of Argentine

policymaking, which is a federal system that delegates a high degree of political power to the provinces. Similar to the national level, this kind of federalism favors executive power at the provincial level as well. According to Urbiztondo, et al., “the chain of institutional authority starts with the president and continues with the governorship.” Governors can provide much-needed support for a president’s administration, but at the same time, more so than Congress or the judiciary, represent a counterweight to presidential authority (Urbiztondo, et al., 2009, 9).

Competing executive powers at the local and national levels have created incentive structures with significant consequences for fiscal and macroeconomic policy. It is not uncommon to see federal transfers of resources to the provinces in exchange for votes. Coordination of local policies for provision of public goods is top-down, unstable, and induces short-term policymaking at both the national and local levels (Urbiztondo, et al., 3-4).

Despite statutory power granted to the executive branch, the executive’s ability to govern often depends on which political party is in power. The Justicialist Party, also referred to as the PJ or the Peronist bloc, is more effective in pushing policy when in power and presenting a more unified and competitive front when in the opposition than the opposing Radical Civic Union, or UCR (Calvo and Murillo 2005, 208).

Calvo and Murillo attribute this disparity in ability to govern between the two parties to the Peronists’ electoral stability at the sub-national level. Since 1983, the PJ has enjoyed more success than the UCR in both gubernatorial and Congressional elections. Between 1983 and 2005, every time the PJ held the presidency, it controlled both houses of Congress as well. The PJ also held majority control in the Senate during that time. The PJ has proven more adept at winning and retaining provincial governments, holding the governorship in at least 12 provinces (of 24 total provinces, including the autonomous city of Buenos Aires) in any given year and keeping a permanent hold on the governorship in eight provinces (Calvo and Murillo, 210-211). According to Calvo and Murillo, the PR derives its sub-national electoral advantage from

a geographic concentration of Peronist support in overrepresented and sparsely populated provinces (Calvo and Murillo 2005, 210-213).

Anderson explains the power of the PR from a different perspective. “Peronism’s predominance in Argentine national politics is made worse by the anti-democratic nature of the party itself,” she writes. Such anti-democratic attributes include:

a closed primary system, strong clientelistic control by the party leadership of internal party decisions, bossism within the labor unions that are Peronism’s main support base, the undermining of an independent judiciary, and the use of extensive clientelistic favors to achieve popular electoral support within poor neighborhoods.

Anderson traces this behavior back to President Menem, who made extensive use of presidential decrees that “many observers felt demonstrated an autocratic personal style and little respect for institutional processes within a democracy.” According to Anderson, Peronism aspires to be a hegemonic party, aiming since its genesis to “govern based on charismatic, authoritarian leadership; corporate control; and multiple alliances” (Anderson 2009, 769).

The UCR, on the other hand, has origins as an oppositional party created to challenge authoritarian rules and advocate elections. The party has thus “failed to build a mass support base and a responsive policy agenda supported by a network of organized groups and party identifiers at the local, provincial, and national levels of government.” The UCR has no base to which it can turn when it does not hold national power or during difficult times when it is in power. “As a result,” Anderson concludes, “Peronists are better able to weather crisis and remain in leadership while the Radicals are severely buffeted as soon as governance becomes difficult” (Anderson 2009, 769-770, 774). The UCR has fallen into extreme disrepute since the “disastrous end” to the Fernando de la Rúa administration, whose time in power straddled the economic crisis. Today, the UCR is not considered competitive in national-level politics (Johnson 2008, 84).

Even when in power, Argentina’s two main parties generally have limited ability to articulate and aggregate the interests of political actors. Urbiztondo, et al., attribute

party weakness to heterogeneous composition, lack of ideology, and disavowal of concrete policy aims (Urbiztondo, et al., 2009, 5). Steinberg similarly notes that when policymaking authority is decentralized, as it is in Argentina, leaders face strong incentives to build coalitions that comprise a variety of social groups, given that power is spread across different regions. “Most politicians,” he writes, “will seek out macroeconomic and exchange rate policy mixes that will win them the support of a variety of interest groups” (Steinberg 2008, 8).

The socioeconomic base of the UCR, for example, is the amorphously defined middle class, while the PJ traditionally combines a “metropolitan coalition based in the urban working class with a peripheral coalition of provincial groups from the country’s more ‘backward’ interior.” Third parties have risen to prominence and then faded, due primarily to inability to build territorial reach in a country with a strong “subnational drag” (Spiller and Tommasi n.d., 15-16). Both party apparatuses exercise more influence at the provincial level than at the federal level. Provincial party leaders choose candidates by elite arrangement, assembly election or closed direct primary, meaning that “legislative seats are essentially the property of the parties” (Johnson 2008, 84). Consequently, political competition is reduced to competition for office; turnover in office tends to correlate with economic cycles. In fact, Urbiztondo, et al., consider backlash and volatility of public attitudes in the electoral arena to be part of the policymaking process (Urbiztondo, et al., 2009, 20, 29).

Agricultural associations do not seem to have a strong affiliation with any of the country’s political parties. The performance of the so-called “agro-deputies,” members of Congress who hail from the Mesa de Enlace and who were elected on the tail of the 2008 protests, has failed to live up to expectations. In an article for the daily newspaper *Página 12*, Premici notes that in their first two years in office, these representatives fought for nothing beyond ending the export tax withholdings and were subsumed under the wing of the opposition Radical party (Premici 2013, “The Failure of the “Agro-Deputies”).

A weak legislative branch contributes to the absence of a professional bureaucracy. Each new executive nominates large numbers of additional political appointees. The result is a parallel bureaucracy with limited institutional knowledge and cooperation across ministries and secretariats, deepening heterogeneity in policy substance and quality, and reinforcing policy incoherence (Spiller and Tommasi n.d., 26).

Federalism, Provincial Politics, and Interest Articulation in Argentine Policymaking

As described by Spiller and Tommasi, national and subnational politics and policies in Argentina are intertwined, electorally and fiscally, to an exceptional degree and should inform the agricultural sector's expectations regarding the expanded Central Bank mandate. The provincial nature of Argentine federalism goes a long way in explaining the allocation of fiscal resources and the fiscal and macroeconomic policies that govern federal spending.

The sources of provincial power are both statutory and structural. Argentina is a federal democracy with a presidential form of government and a bicameral legislature. The federation consists of 23 provinces and a semi-autonomous federal capital. Ardanaz, et al., stress the political and administrative power of provincial governments. Provincial governments have their own constitutions and electoral rules, control vital areas of public policy, such as education and health, and implement national public policies such as social welfare programs. Furthermore, under the Argentine Constitution's residual power clause, provinces reserve all powers not explicitly delegated to the federal government (Ardanaz 2013, et al., 2).

Of course, the powers of provincial actors extend beyond their statutory responsibilities. Provincial actors influence national politics and policymaking processes through a number of structural arrangements, including direct exchanges with the president and his/her cabinet and a strong hand in Congressional candidate selection and electoral processes.

Provincial powers are most prominently represented in the figure of the governor, who heads the provincial executive branch. Ardanaz, et al., contend that almost every

important decision made at the national level since the beginning of the Menem administration has been negotiated with provincial governors to some degree by the president and his/her ministers. The governors then “instruct” national legislators from their provinces to support the decision (Ardanaz, et al., 2013, 3). Because electoral outcomes have resulted in tight legislative majorities, provincial command of even small blocks of votes gives governors the power to threaten executive agendas, creating opportunities to exchange support for benefits for their provinces (Spiller and Tommasi n.d., 19).

Arbanaz, et al., also find evidence of a strong incumbent advantage in provincial elections, particularly in peripheral provinces with high levels of poverty and low levels of education. The political elite in some provinces may even be described as “subnational political dynasties.” The result is low party turnover, high rates of reelection, and political concentration. Single-party monopolies on provincial leadership have been further consolidated through provincial constitutional changes to allow for reelection. Moreover, electoral systems favor large legislative majorities through mechanisms such as electoral thresholds (Ardanaz, et al., 2013, 6-8).

Provincial-level party leaders are the key players in the Congressional nomination process, while national party leadership plays only a secondary role (Spiller and Tommasi n.d., 18). The president often bypasses Congress and deals directly with the more influential provincial party elites. Congress is conspicuously absent from political transactions, whereas provincial governors often have a direct line of communication with the administration. Ardanaz, et al., describe a principal-agent dynamic between provincial party leaders and national legislators, whereby the legislative branch serves to formalize deals informally struck between the president, provincial governors, and interest groups (Ardanaz, et al., 2013, 2). Urbiztondo, et al., in fact, offer a quite damning assessment of Congress. Attributing the legislature’s weakness to electoral rules, they describe elected officials as “non-professional” proxies for provincial elites, with “neither the expertise nor the incentives to initiate influential legislation, control

public administration, invest in strengthening congressional institutions, or build long-term legislative careers” (Urbiztondo, et al., 2009, 10).

Decentralized Incentive Structures within the Federalist System

Argentina’s decentralized federal system undergirds the incentives that guide the behavior of political actors. Ardanaz, et al., divide sub-national political incentives into three categories. The first is electoral and partisan connections. The province is the locus of party competition and the base of political support for politicians and political parties. Argentina’s large national political parties are “little more than (potentially volatile) confederate alliances between largely autonomous and quite powerful leaders of provincial party branches.” Argentina’s two major parties, the UCR and PJ, themselves were forged as “collections of bilateral bargains between extraordinarily powerful presidents at the center (Hipólito Yrigoyen, in the case of the UCR; Juan Perón, in the case of the PJ) and locally dominant political elites.” Ardanaz, et al., note that when either of the major parties wins the presidency, it functions according to independent bilateral agreements between the president and provincial leaders. When a party loses the presidency and is relegated to the opposition, it operates as a nominally allied and loosely connected confederation among autonomous provincial organizations (Ardanaz, et al., 2013, 3).

Second, provincial leaders have significant influence over electoral processes at the national level. Dates for both provincial elections and for national congressional elections are set at the provincial level. Governors can thus choose whether to isolate provincial outcomes from national electoral trends or to exploit “electoral externalities.” In effect, provincial electoral dynamics often determine outcomes in national congressional elections (Ardanaz, et al., 2013, 3).

Provincial leaders exert further subnational influence on national elections through legislative candidate selection methods. In Argentina, political parties determine selection procedures for party leadership positions and candidacies for offices at every level of government. Selection mechanisms vary across parties and provinces and

change over time. Generally, candidates are selected through elite arrangements, assembly election, or primaries. In any event, success in intra-party contests typically depends on a candidate's ability to distribute resources through the party machine, a factor that gives incumbents with access to public coffers a financial advantage. In this way, Ardanaz, et al., write, political careers are structured at the provincial level (Ardanaz, et al., 2013, 3).

Candidate selection processes can have great impact on policy, in large part due to small province overrepresentation in Congress. Ardanaz, et al., note that the Argentine Senate ranked highest in terms of territorial overrepresentation among the world's upper chambers and in the top 20 among a survey of 78 lower chambers. Overrepresentation affects the distribution of public resources and spending across provinces, as no national electoral or legislative coalition can succeed without the support of regional power structures in overrepresented provinces (Ardanaz, et al., 2013, 3-4).

The third structural force of subnational influence identified by Ardanaz, et al., is Argentina's system of fiscal federalism. Provincial governments are responsible for a large share of total spending in Argentina, but collect only a small portion of total tax revenue. This mismatch creates what Ardanaz, et al., call an extraordinary vertical fiscal imbalance, which encourages horse-trading between the legislature and the executive. The government finances this imbalance from a common pool of resources governed by a Federal Tax-Sharing Agreement. Empirically, administrations exercise ample discretion over how these funds are allocated to the provinces. "The methods by which these [discretionary] channels have been modified are multiple, and their relative use and importance has varied over time, depending on various economic and political circumstances," Ardanaz, et al., write, "but the underlying political logic has always been the same." Provincial governments exchange electoral cooperation and Congressional votes in exchange for fiscal resources; policymakers then attempt to impose rigidities in the tax-sharing agreement, for example by earmarking taxes for specific programs with regional distributional effects, in order to lock in fiscal policy (Spiller and Tommasi n.d., 22; Ardanaz, et al., 2013-5).

Richardson argues that the imposition of export taxes coincides with this centralized feature in the federal distribution of fiscal resources. Export taxes are unique in that they do not factor into federal revenue sharing agreements. The administration exercises much more discretion in whether and how these funds are shared with the provinces (Richardson 2008, 243-244).

Where revenue sharing does occur, the distribution of fiscal transfers is skewed toward provinces with limited political competition. This is because the federal government often uses large fiscal transfers to the provinces, for instance in the form of infrastructure investment, to reward political cooperation from provincial governors. Indeed, Ardanaz, et al., show that transfers grow larger as provincial electoral margins of victory grow wider. Because provinces are characterized by restricted political competition and high concentration of power in the hands of the governors, there is a “reinforcing connection between political dominance at the provincial level and political importance at the national level.” This connection weakens accountability and governance at the national level (Ardanaz, et al., 2013, 2, 10-12).

Interestingly, Ardanaz, et al., note, political constructions that are reinforced and rewarded at the provincial level serve as a springboard for provincial politicians to gain national influence. The most successful national-level politicians frequently hail from the provinces with the weakest “democratic credentials,” including Carlos Menem, Adolfo Rodríguez Saá, and Nestor Kirchner (Ardanaz, et al., 2013, 14).

Short-Term Trajectory of the Policymaking Process

Considering these characteristics together, the prominent feature of policymaking in Argentina is its short trajectory. The institutional environment encourages a “political-economic equilibrium” in which interactions between the public and private sectors are dominated by considerations of the immediate term. For example, Urbiztondo, et al., observe that in response to economic shocks, governments tend to adopt reactive, short-term policies that redistribute assets through the exchange rate, subsidies, and public expenditure. The private sector reacts to these policies with similar short-term abandon.

Urbiztondo, et al., write, “economic opportunism and (subtle) confiscation of private assets by public authorities have spread as a crisis remedy mechanism over time.” As we have seen, the success of the agricultural sector makes it an easy target for resources, further encouraging short-term decision making (Urbiztondo, et al., 2009, 3, 50).

Opportunism in the policymaking process reduces willingness for actors to engage in inter-temporal policy agreements. Agricultural groups are as guilty of short-term thinking as any other actor. As will be discussed in the next chapter, agricultural groups come together in response to a threat to common interests, but have made little headway in constructing a unified, constructive, and long-term national policy platform. Myopic policymaking yields a number of practical consequences. It discourages investment in long-term projects, reallocates resources to unproductive sectors, and reduces the government’s bargaining power to the ebbs and flows of the business cycle. “In times of economic prosperity,” Urbiztondo, et al., write, “industrial actors’ strategy towards the government seems to be limited to precise demands that do not question the economic plans as a whole. Conversely, in times of economic turmoil, the government is weaker and more likely to yield to sectoral demands” (Urbiztondo, et al., 2009, 3, 23).

One final incentive for myopic decision-making is embedded in the power of the executive branch. Wiesner offers the hypothesis that elections perpetuate short-term policy horizons by changing the overall public sector incentive structure and driving increases in public spending. Presidents facing reelection exhibit a proclivity for high expenditures, political favoritism, and “intended and unintended ... policy risks that gradually [drain] the macroeconomic framework of much-needed flexibility.” Incumbents can neutralize opposition to expenditure policies by compensating short-term interest groups in exchange for their support or acquiescence. Wiesner cites anecdotal evidence of this phenomenon from 1998, 2003, and 2007, paying significant attention to the impact of the election climate on the “fiscal failure” that preceded the 2001 crisis (Wiesner 2008, 96, 106-107).

Informal Channels for Agricultural Interest Articulation

With limited influence in formal and institutionalized policymaking channels, the agricultural sector increasingly relies on informal mechanisms for influencing economic policy. These mechanisms range from withholding investment to mobilizing mass protests. The sector can also influence policy by framing the issues in such a way as to legitimize their positions and steer public opinion.

Business Protest

Fairfield (2011) advances the argument that business coalitions possess influence and resources entirely unique from those employed by labor unions and popular sectors. Businesses exert political influence with a combination of structural and instrumental power.

Structural power, Fairfield writes, is power that “arises from the anticipated aggregate effects of individual profit-maximizing decisions.” The source of structural power is a concern from policymakers that a particular policy or policy reform will compel businesses to reduce investment, send capital abroad, or limit production in important economic sectors. This kind of power resides in an assumption that firms and capital owners will act to maximize profit; if these actors reduce investment or production, there is risk of backlash against policymakers when growth, employment, or stability suffers. Structural power requires no organization or political action; rather it is a collective response to market signals (Fairfield 2011, 425-426, 428).

Instrumental power, on the other hand, is exerted through direct political activities. These activities may include lobbying, direct participation in policymaking, or campaign finance. An organization acquires instrumental power either through relationships with policymakers or through resources. Relationships include government positions or appointments to high-level executive positions; informal ties to policymakers; institutionalized channels of government consultation; and partisan linkages, whereby a business is part of a party’s core constituency, agenda, and resources.

Resources enhance a business' "ability to forge common positions and coordinate policy actions" and thus improve its bargaining positions (Fairfield, 426, 428).

Under circumstances in which these sources of power are lacking, businesses will resort to social or economic protest. Fairfield defines business protest as public and/or disruptive collective action undertaken or instigated by business actors outside of formal policymaking arenas. Social protest, for example, might include rallies, roadblocks, marches, or other actions involving mass participation. Such actions could be expected from groups capable of mobilizing large numbers of people, such as labor unions or civic associations. Economic protest, on the other hand, describes actions designed to disrupt economic activity, often at significant short-term cost for participants. Businesses might concertedly withhold investment, halt production, or disrupt the sale or distribution of goods (Fairfield 2011, 429).

Fairfield argues that commercialization strikes were a defining feature of the 2008 protests. In their efforts to oppose new measures to increase export taxes, producers halted the sale and delivery of agricultural products (primarily meat and grains) to domestic and export markets. Such measures required collective action and entailed non-trivial short-term costs to the Mesa de Enlace. But the protests nonetheless had their desired effect. Food supplies declined, prices increased, and there were shortages of beef, milk, and vegetables (Fairfield 2011, 442-443).

Fairfield thus makes an important distinction between market coordination and political coordination when engaging in protest and/or disinvestment, and the respective reactions that might be expected from policymakers. "For example," she writes, "if a policy does not significantly alter market incentives but does provoke politically-coordinated disinvestment, policymakers may attempt to ride out the business strike and wait for the logic of individual short-term profitability to preempt the logic of collective action." Consequently, businesses are more likely to protest when their power is poor or declining (Fairfield 2011, 430).

Logically, Fairfield questions why agricultural producers failed to deter periodic export tax increases between 2002 and 2007, given the importance of agro-exports in

financing Néstor Kirchner's economic model and political coalition, yet united to engage in sustained protest in response to the 2008 tax increases. She concludes that the structural and instrumental power of Argentina's producer associations, prior to 2008, was weak. Structural power was weak because of favorable export conditions. Given high global commodities prices, policymakers could be confident that tax increases would not force reductions in investment or production. Instrumental power was weak by virtue of fragmentation within the agricultural sector and weak relationships between the sector and policymakers. The 2008 export tax reform, however, "resolved the producers' collective action problems by intensifying their shared grievances and convincing all sub-sectors that massive protest was the only way to achieve influence." Protests, Fairfield argues, "helped tip the balance in favor of the producers in congress, the arena in which the fate of the reform was ultimately decided" (Fairfield 2011, 427, 431).

Framing and Legitimacy

Another way producers can affect policy decisions is by framing issues so that their positions gain legitimacy with the general public. Legitimacy is especially important during periods of public protest. This became clear during the 2008 protests against the increase in export taxes. The involvement of the FAA enabled the rural sector to dispel accusations made by Cristina Fernández de Kirchner that the protests represented elite interests only. Fairfield also writes that the producers succeeded in framing the debate as federal overreach, thus "[capitalizing] on discontent among many governors over the executive's discretionary allocation of export tax revenue to the provinces, rather than automatic revenue sharing, as was the rule with other taxes" (Fairfield 2011, 444).

By working to frame public discourse, the agricultural sector may serve a second function by promoting awareness. Wiesner suggests that there is a learning deficit in Argentina with regard to its political and economic institutions and processes. Questioning why the learning process is so "protracted and fraught with insufficient

‘right’ incentives to politically reward appropriate lesson taking,” he concludes that Argentina’s macroeconomic governance framework is vulnerable to an information failure typical of principal-agent dynamics (in this case, the general public is the principal and the policymakers are the agents). There is little political demand for institutional transformation because there is insufficient awareness of the causes of macroeconomic stability or instability (Wiesner 2008, 111, 114-115).

A key area where information available to the public seems to be lacking is in the realm of export taxes. Urbiztondo, et al., point out that the effects of export taxes, though distortionary, are not immediately apparent to the general public. In fact, export taxes receive a certain degree of support because they ostensibly only affect the windfall profits of producers, with little cost and much benefit to society. Moreover, according to Urbiztondo, et al., in the short term confiscatory policies are primarily reflected in land values and thus not immediately apparent to the average citizen (Urbiztondo, et al., 2009, 57).

Conclusion

This chapter has two important takeaways. First, to the extent that the agricultural sector hopes to influence monetary policy and Central Bank governance, it likely must do so through the executive branch. Given the sector’s waning influence in institutionalized channels and the exceptional devolution of power to provincial governments, this is no easy task. More likely, producers will attempt to influence policy through informal means, a strategy that is subject to its own set of constraints that will be discussed in the next chapter.

The second takeaway is the non-cooperative and non-cohesive nature of the policymaking process. Structural factors, such as the statutory power of the federal executive branch, the absence of a professional bureaucracy, and party politics at the provincial level, distort formal and informal incentives and encourage sporadic and opportunistic behavior from both public and private-sector actors. These incentives preclude the coherence upon which the macroeconomic philosophy of an expanded

Central Bank mandate is predicated. The chain of influence in the policymaking chain – provincial pull on Congress and the federal executive, the federal executive’s influence on the Central Bank, and the bank’s increased discretionary flexibility with the money supply – suggest an increased possibility for erratic fiscal behavior, pressure on domestic prices, and deteriorating conditions for agricultural production.

The next and final chapter examines how agricultural producers perceive and articulate their sectoral interests in the context of a broader Central Bank mandate, given the dynamics of the policymaking process. Given the incentives woven into the policymaking process, informal modes of interest articulation, such as protest and use of media to frame the debate, are common and arguably the most effective tools at the disposal of the Mesa de Enlace. As we shall see in the next chapter, protest serves as a means of opening up institutionalized channels to influence the executive branch.

Chapter 6: Challenges of Agricultural Interest Articulation, the Formation of Agrarian Coalitions, and Access to the Central Bank

Introduction

This chapter examines the relationship between the Mesa de Enlace and the BCRA within the channels of the Argentine policymaking process. I ask three closely related questions: What are the impediments to a strong coalition for agricultural interest groups? Does the Mesa de Enlace try to influence monetary policymaking at the bank? Is the Mesa de Enlace successful in swaying monetary policy in its favor?

This chapter argues that in Argentina's policymaking apparatus, successful articulation of agricultural interests is a function of two factors. The first factor is the composition and tactics of the groups themselves. Can disperse actors in the agricultural sector cooperate to aggregate and communicate their policy positions? The second pertains to the structures of the policymaking process. Are there institutional and/or informal channels of communication between agricultural interest groups and the government? Recognizing a predominance of power in the executive branch, can an agrarian coalition advance its policy interests with the president and his or her cabinet at the federal level, and with governors and party elites at the provincial level?

The agricultural sector is characterized by a divergence of interests and is geographically scattered. The sector thus encounters a powerful collective action problem with which other interests groups competing for influence and resources, such as organized labor, do not have to contend. Agricultural interest groups are thus at a distinct disadvantage electorally and in their relationship with major political parties.

The transition to soy production, however, has alleviated this disadvantage. Not only does soy production generate sizable revenue that gives the sector a resource advantage, but it eliminates political competition with popular sectors over the desired value of wage-goods. Agricultural exports at one time were commonly blamed for inflation. Now, although tax withholdings remain the sector's primary challenge, the

fight against inflation allows for alignment between agricultural and non-agricultural interests.

Dynamics of Rural Interest Articulation

As described by Sturzenegger (1991), governments are largely composed of different groups and individuals who seek to enhance their own special interests. Private agents in pluralistic societies try to maximize their welfare in several ways, one of which is the production of goods or services. In this context, Sturzenegger defines lobbying as “the use of resources to obtain government regulations that enhance the incomes of members of some particular group in the society by raising the prices of goods they sell, or by lowering the prices of goods they purchase.” In other words, economic interest groups seek sector-specific redistributions of income through policies that increase or decrease sector-specific factor prices. Importantly, this framework holds true in the context of wage good prices, which Sturzenegger contends become inputs to industrial production (Sturzenegger 1991, 39, 43).

These assumptions deny the full autonomy of decisionmakers. Fearing social unrest or loss of power, unstable governments (and economic teams) accede to political pressures. Sturzenegger thus finds it appropriate to view government interventions in agricultural markets as “compromises between the goals of different pressure groups and the goals of government” (Sturzenegger 1991, 39-40).

Obstacles to Effective Rural Interest Articulation

The biggest obstacle to rural interest articulation is the composition of the rural sector, itself. In Argentina, the rural sector consists of several hundred thousand farmers dispersed throughout the country. This distribution increases the cost of collective action, creates difficulty in coordinating and monitoring activity and encourages free riding. Ultimately, the composition of the rural sector raises the threshold for action. According to Sturzenegger, a policy’s impact must reduce rural incomes below a certain “parity” level, at which point the marginal cost of not lobbying exceeds the marginal cost of

lobbying (Sturzenegger 1991, 44). From this perspective, we should expect to see lobbying decline with increasing income, and vice versa (Sturzenegger 1991, 42).

In the rural dynamic, lobbying is more likely to occur under crisis conditions, when the costs of inaction are transparent. Sectors form alliances in response to threats, not necessarily to construct a common long-term platform (Urbiztondo, et al., 2009, 24). The Mesa de Enlace's 2008 response to export tax hikes makes sense from this cost-benefit perspective, as the increased tax burden transparently increased the marginal cost of inaction. More systemic costs, however, such as those associated with the real exchange rate, are not as transparent. Sturzenegger and Salazni recall that at any given moment, "the effective level of real rent per hectare depends on relative agricultural international prices, the [real exchange rate], and agricultural relative [total factor productivity], in addition to the level of export taxation." It is nonetheless exceedingly difficult for the government to ascertain to what extent the real exchange rate triggers rural interests (Sturzenegger and Salazni 2007, 19-20).

Industrial sector lobbies, by nature highly concentrated in urban areas, are free of these constraints. Traditionally the relative strength of industrial lobbies hurt rural sector interests, as the industrial sector acts to improve its prices relative to agricultural prices to increase real wages and induce a functional redistribution of income from land to industrial capital. The only industry sectors interested in high agricultural prices are producers of agricultural inputs, such as machinery and agro-chemicals, which do not have a strong foothold in Argentina (Sturzenegger 1991, 43).

Interest Group Activity in Argentina

Among the various channels of influence available to interest groups within Argentina's policymaking process, Sturzenegger identifies meetings and social activities with legislators, politicians, and bureaucrats; financing of studies that support favorable legislation; monetary contributions to election campaigns; money or other rewards for legislators and regulators; public opinion campaigns; and direct participation in government by members of the groups (Sturzenegger 1991, 42). Agricultural interest

groups are most likely to shape public policy through their representation in large peak associations, such as the individual producer associations of the Mesa de Enlace.

Concerted action in the sector, however, is difficult. Johnson writes that peak associations have historically struggled with the executive branch and with each other for resources and political privileges (Johnson 2008, 85). The internal heterogeneity of the Mesa de Enlace presents a strong incentive for each association to negotiate separately with the government, a dynamic commonly exploited by Argentine policymakers (Urbiztondo, et al., 2009, 4). Fairfield writes that this collective action problem has led to poorly coordinated lobbying and, prior to 2008 at least, “precluded all but brief, small-scale, and hence ineffective protests” in response to government tax policies (Fairfield 2011, 431). Such are the forces with which the Mesa de Enlace must contend.

The Genesis of the Mesa de Enlace: History and Dynamics of Rural Interest Group Articulation

The Mesa de Enlace, or Agricultural Liaison Commission (*Comisión de Enlace Agropecuaria*) represents Argentina’s four largest and most influential agricultural producer associations. The Mesa de Enlace came together in 2008 in response to Resolution 125, issued by the Ministry of Economy and Finance. The resolution established adjustable tax rates on exports of soy, wheat, sunflower, corn, and derivatives of these crops, by which rates would increase in accordance with global soy prices. The effect of the adjustable rate was particularly strong for soy and soy derivatives. Soy prices at the time had reached \$550 USD per ton, meaning the effective tax rate would rise to 44%. Although the measure lent a certain degree of certainty to producer expectations, it sparked the ire of Argentina’s producer associations, in part because it capped potential profits and in part because it was imposed by decree without legislative approval (Mediavilla 2013, 111-112). The Mesa de Enlace represented an attempt to transition from informal cooperation between producer associations to an arrangement of formal coordination (Fairfield 2011, 441).

The four organizations with a seat at the Mesa de Enlace are the Argentine Rural Society, or the SRA; the Argentine Rural Confederations, or the CRA; the Argentine Agrarian Federation, or the FAA; and the Agricultural Intercooperative Confederation, or CONINAGRO. Between these organizations, membership varies between large and small producers and across distinct geographic regions. But generally speaking, these organizations represent the interests of rural ownership in relation to labor syndicates and the government, and are the major vehicles for rural political organization in Argentina.

The SRA is perhaps the most influential producers association, given its resources and traditional ties with the government. As described by Mediavilla (2013), the SRA consists primarily of large landowners and strongly advocates for free market policies. In this vein, it opposes export quotas, price controls, and subsidies and compensations that it finds to be detrimental to producer interests, arguing that these measures ultimately reduce production (Mediavilla 2013, 120).

The CRA, on the other hand, is a confederal association of rural producers that groups 310 local companies (*sociedades*) into 13 confederations and federations. In total, the CRA numbers 110,000 farmers. It is the agricultural entity with the largest presence in Argentina and brings together small, medium, and large producers dedicated to a wide range of activities, including crop and livestock production, wine production, horticulture, and beekeeping (Mediavilla 2013, 114).

The SRA and CRA emphatically supported the economic policies of the military dictatorship that governed Argentina between 1976 and 1983. Mediavilla writes that objections to the regime from these organizations surfaced in 1982, but these objections focused on the regime's strategies for achieving its political economic objectives, not on the objectives *per se*. Years later, the SRA and CRA likewise openly supported the successive administrations of Carlos Menem in 1989 and 1995 (Mediavilla 2013, 114).

The FAA is a private entity concentrated in the provinces of Santa Fe and Córdoba. It derives its origins from a sharecropper strike that took place in 1912 and stakes a claim as organizer of the first agrarian strike in Argentina. Unlike the SRA and CRA, the FAA supports an interventionist state that offers production incentives and

programs for small and medium agricultural producers. Mediavilla writes that the FAA values a collaborative framework for economic policy that ensures predictability with regard to export and marketing regulations. Among other things, the FAA has taken issue with restrictions on the export of wheat (Mediavilla 113, 114-116).

Two trends in particular are of deep concern for the FAA. First, the federation opposes the progressive concentration of production in the agricultural sector. Mediavilla points out, for example, that 10% of the country's producers manage 70% of total agricultural production. The FAA thus argues for state regulation of monopolies, oligopolies, and multinationals, and has advocated for the creation of an Agency for Control and Arbitration of Agro-Food Trade and Industry. Argentina's wheat and soy sectors are particularly concentrated. These two sectors are a second source of concern for the FAA: the diminishing diversity of agricultural production in Argentina. The federation contends that the rapid transition to soy production leaves the economy vulnerable to the performance of just one product, and at the same time threatens to displace the production of goods consumed domestically (Mediavilla 2013, 117).

In the past, the SRA and CRA have frequently been at odds with positions taken by the FAA. For example, the SRA and CRA have argued that compensations or benefits conferred by the state upon the rural sector should apply uniformly to all producers; the FAA, on the other hand, has argued that the state should distinguish between small and medium producers and cooperatives and larger agro-industrial corporations (Mediavilla 2013, 121). This discrepancy extends to the debate over export taxes, as the FAA favors a segmentation of export rights and restrictions based on farm size and output (Federación Agraria Argentina 2013, "*Yauhar desnudó la realidad...*").

The fourth organization with a seat at the Mesa de Enlace is CONINAGRO. With representation in every province (and particular strength in the province of Córdoba), CONINAGRO consists of ten federations that together total 120,000 agrarian cooperatives. These cooperatives are responsible for 20.5% of total cereal and oleaginous plant production, but include producers of other goods, including rice, cotton, wool, tea, and tobacco. Like the SRA and CRA, the confederation generally stands

opposed to measures that distort or restrict free competition in domestic and international markets (Mediavilla 2013, 121).

CONINAGRO has adopted a somewhat nuanced political stance, however, somewhere between the positions of the SRA and CRA and the FAA. CONINAGRO aligns more closely with the ideological positions of the SRA and CRA; but harbors concerns about deteriorating conditions for small and medium farmers. Governments have at times successfully coopted CONINAGRO's support by granting concessions to these farmers. Mediavilla attributes this nuance to recurring ambiguity in the confederation's relationship with different administrations, its ideological base, and the diverse characteristics of the cooperatives that comprise its membership. CONINAGRO adopted an adversarial position vis-à-vis the Menem administration, but was more willing to engage the Kirchner administration given the devaluation and high commodities prices. The confederation's relationship with the government has weakened, however, since 2008 (Mediavilla 2013, 114).

Though only recently constituted in response to the 2008 tax measures, the Mesa de Enlace as a coalition could possess significant structural and instrumental power. As far back as the 1980s, the government of President Raúl Alfonsín recognized these four organizations in their individual capacities as formal interlocutors for Argentina's agricultural interests. As discussed in Chapter 5, when these groups find their structural and instrumental power to be weak, they are able to influence public opinion and policy through informal protest measures such as mass mobilizations, roadblocks, and production strikes. This informal source of power was on display in 2008, as the Mesa de Enlace coordinated every strike, controlled shipments and roadblocks, organized mobilizations, and served as the lead representative from the agricultural sector in negotiations between the administration and Congress (Mediavilla 2013, 99, 113, 115).

Since 2008, the Mesa de Enlace has remained vigilant in opposition to the Fernández de Kirchner administration. The primary tool at the coalition's disposal is the use of the media and press to communicate organizational motives and positions on government policy. Nonetheless, Mediavilla notes that the members of the Mesa de

Enlace principally use the forum to present a united front on general or abstract issues. On more concrete issues, such as the proposed 2010-2020 Participatory and Federal Strategic Agro-Food and Agro-Industrial Plan (*Plan Estratégico Agroalimentario y Agroindustrial, Participativo y Federal 2010-2020*), differences emerge that are as deep as the *raison d'être* of each institution (Mediavilla 2013, 115, 124).

To some extent, despite the FAA's misgivings about concentration in the agricultural sector, the growth and intensification of soybean cultivation has united the rural sector. Rising soybean prices and export restrictions on wage goods favor soy cultivation. "Consequently," Richardson writes, "a government policy to tax the price of soy managed to do what rural leaders had been unable to do for decades: unite the rural sector and seat the leaders of groups as disparate as the FAA and the SRA on the same side of the table" (Richardson 2008, 251-252).

Competing Interests and Interest Group Alignment

In addition to agricultural producers associations, Urbiztondo, et al., list a number of influential interest groups spanning all economic sectors, including the General Confederation of Labor (*Confederación General de Trabajo*), or CGT; the Argentine Industrial Union (*Unión Industrial Argentina*), or UIA; and the Association of Argentine Banks (*Asociación de Bancos Argentinos*). The influence of these peak associations has waned in recent years, however, as alternative organizations have emerged, including the Confederation of Argentine Workers (*Confederación de Trabajadores Argentinos*); the General Economic Confederation (*Confederación General Económica*), or CGE; and newly organized "picketers" (*piqueteros*) representing unemployed urban workers (Urbiztondo, et al., 2009, 10).

Labor is a particularly decisive actor in the policymaking process. Labor's historical ties to the Justicialist Party make it a stronger and more influential political actor than associations representing capital. Urbiztondo, et al., identify a number of pillars of union political power in Argentina, including compulsory contributions to healthcare funds, sectoral monopoly on representation, compulsory affiliation, and

collective bargaining power. Compared to the agricultural sector, labor has a “stronger, more homogenous, collective and open participation in the policymaking process” (Urbiztondo, et al., 2009, 4, 12, 17).

Rural-Urban Conflict and the Wage-Goods Conundrum

Richardson proposes that conflicts of interest between rural and urban actors in Argentina stem from competing interests in the price of beef and wheat. These two commodities for a long time were Argentina’s main exports, but were also the primary consumption goods of urban workers, or what Richardson refers to as wage goods. Wage goods carry special distinction in Argentina because demand for these goods is inelastic, and so changes in their price directly impact real wages. Historically, producers favored higher prices for these goods, while consumers favored lower prices. Before the boom in soy production, wage goods linked trade policy and wage policy in an adversarial way. Richardson writes (Richardson 2008, 229, 235):

Redistribution to urban workers involved restricting exports, thereby increasing the domestic supply of these ‘wage goods,’ yet reducing rural income and exacerbating the trade imbalance. Conversely, resolving trade imbalances involved promoting exports, which redistributed away from urban workers by reducing domestic supply of wage goods. In the context of a large, mobilized labor movement, these economic linkages between trade and wage policy led to recurring economic crises and shifting political coalitions.

Attempts by policymakers to manage the tradeoffs between a profitable export sector and urban food prices led to what Richardson calls the wage-goods cycle. This cycle is both economic and political. Economically, export booms resulting from favorable international commodity prices drive up domestic prices. The government attempts to mitigate the increase in prices by restricting exports, which in turn leads to trade deficits and balance-of-payments crises. The government must then take measures to encourage exports, and the cycle starts over. These “counteracting pressures” create what has become known as a “stop-go” pattern of economic growth, characterized by

periods of rapid expansion interrupted by foreign exchange crises and recessions (Richardson 2008, 232).

Politically, the stop-go nature of the Argentine economy was accompanied by a cyclical pattern of political coalition formation. Richardson calls upon a framework designed by O'Donnell (1978), which identifies four actors that form Argentina's influential political alliances: the popular sector, comprised of the working class and personified by the CGT; the rural Pampean bourgeoisie, responsible for agricultural commodity production and represented by the SRA; the internationalized urban bourgeoisie, comprised of large, capital-intensive industrial firms and led by the UIA; and a national urban bourgeoisie, comprised of smaller domestic firms and led by the CGE (Richardson 2008, 233).

Within this system, political power traditionally oscillated between two alliances, organized around two distinct political cleavages. Each coalition was unstable and held together by short-term interests, ironically "implementing economic policies that would cause its dissolution in an economic crisis." The first alliance was a populist alliance divided along a *rural-urban* cleavage. This alliance, comprised of the popular sector and the national urban bourgeoisie, favored restrictions on exports in order to lower food prices and increase real wages, and in effect transfer resources from the rural sector to the coalition's urban support base. Under such an arrangement, the popular sector enjoyed higher real wages as the price of wage goods fell, while the urban bourgeoisie enjoys increased domestic demand and relieved itself of pressure from organized labor. Over the long term, however, such policies encountered balance of payment constraints. Urban capital, concerned by the prospect of losing access to international finance markets, would withdraw its support from the populist government and join rural producers in their support for a stronger export sector (Richardson 2008, 233-236).

The second alliance in the political cycle is accordingly a capitalist alliance that, according to Richardson, brings together the dominant groups in the rural and urban sectors along a *class-based* cleavage. Devaluation and export promotion would generate foreign revenue to address the balance of payments, but also reduce supplies of beef and

wheat on the domestic market, causing prices to rise and real incomes to fall. Falling real incomes would revitalize the populist alliance, the urban bourgeoisie would return its support to economic stimulus and policies to increase real wages, and the cycle would begin again (Richardson 2008, 234-235).

The strength of organized labor and stagnant agricultural productivity exacerbated the oscillations of the wage-goods cycle. Labor had the size and strength to effect resource transfers from other sectors to the working class, while agricultural producers could not produce enough to satisfy both external and domestic markets. Richardson argues that these dynamics and the uncertainty of future returns compelled actors to pursue short-term interests. “In particular,” he writes, “the wage-goods effect ensured that a period of favorable prices for the rural sector would be short-lived, for it encouraged the reformation of the populist alliance against the pro-rural regime” (Richardson 2008, 235).

The growth of the soybean sector changed this dynamic. The shift to soy production eliminated the “key structural foundation” of the wage-goods cycle – the reliance on beef and wheat as export commodities. Soybean mitigates the rural-urban conflict in two ways. First, the working class does not consume soybeans. The export of soybeans and soybean byproducts does not affect the real purchasing power of urban workers. Second, revenue from export taxes on soybean and its byproducts can theoretically finance populist programs without harming the purchasing power of urban workers or cutting into the country’s balance of payments. Likewise, now that beef and wheat contribute significantly less to Argentina’s foreign exchange reserves, the government is free to selectively restrict their export to increase real wages without risking a balance-of-payments crisis (Richardson, 228, 236-238).

There is, of course, a possibility that increased soy production in response to favorable economic conditions could displace beef and wheat production. But two factors soften this indirect wage-goods effect. First, in agronomical terms, wheat and soy are complementary and can be grown in the same year. Second, technological improvements have favored increased productivity and expanded the production frontier

of all agricultural goods. With the advent of feed lots, until recently cattle production had been on the rise despite conversion of pasture to agricultural use. Richardson concludes that “the rise of soy has not had meaningful indirect effects on the quantity of beef and wheat supplied to the domestic market” (Richardson 2008, 237-238). In fact, in a recent communiqué released by the Mesa de Enlace, the coalition showed much greater concern about the impact of export controls on wheat production than about the impact of expanding soy production. The communiqué reads (Mesa de Enlace 2012):

In the past six years the wheat market has been destroyed. The present campaign estimates that planting intentions have declined approximately 48%. We are seeing the same negative effect on the commercialization of corn and other agricultural products.

From this perspective, the effect of export booms, busts, and taxes on political stability is conditioned by the economic linkages between the export sector and the domestic economy. In the age of soy, there are closer linkages between export agriculture and populist political coalitions than before. The interests of the two sectors are no longer so definitively at odds with one another. There is, however, persistent potential for conflict over inflation and the real exchange rate.

Interest Alignment around Exchange Rates

When it comes to the real exchange rate, urban and rural sectors are often in direct conflict with one another. Urban labor interests include wage increases and control of public resources and health care funds, and thus favor an overvalued domestic currency, which reduces the real price of traded goods (Urbiztondo, et al., 2009, 18). Producers, of course, favor an undervalued exchange rate, which increases profit margins in dollar-denominated markets.

Frieden argues that the politicization of monetary policy hinges on the level of openness in an economy. In a closed economy, a monetary stimulus raises nominal prices, reduces real interest rates, lowers borrowing costs and encourages investment and credit-financed consumer spending. Monetary policy affects the nominal price level but

not relative prices between goods and services. The effects of stimulus may be felt by debtors and creditors with nominal contracts, and political divisions might be expected between borrowers and savers. Industries such as construction and consumer durables are also sensitive to interest rates because their products are often purchased on credit, whereas the financial sector tends to support higher interest rates. But all things considered, Frieden expects the politics of monetary policy in a closed economy to be subdued. Concerned parties are either small groups or broad masses of borrowers, savers, workers or consumers with little organizational capacity (Frieden 1994, 83).

In an open economy, however, monetary policy affects the relative price of traded and non-traded goods and services. If monetary policy drives down the value of the domestic currency, then locally produced goods become cheaper compared to imports, and the demand for domestically produced traded goods increases. Exchange rate movements thus immediately affect a wide range of prices and affect those exposed to international trade and payments, including exporters, import-competitors, international banks, and multinational corporations. In an open economy, Frieden argues, “currency movements affect relative prices more directly and for more concentrated interests than overall movements in the nominal price level,” so that goods and capital market integration should correspond with increased political attention to exchange rates (Frieden 1994, 84).

The tradeoff between independent monetary policy, which requires a flexible exchange rate, and relinquishing monetary autonomy for a stable and predictable exchange rate, means that governments must in effect choose winners and losers. Frieden distinguishes between actors with a preference for exchange rate stability and actors with a preference for monetary policy independence. The former includes those heavily involved in international trade and investment, who value the predictability of the exchange rate. The latter is comprised of those whose business is predominantly domestic and for whom foreign trade and payments are insignificant, including producers of non-traded goods and services. Meanwhile, international investors also favor a strong currency so that they can purchase overseas assets more cheaply (Frieden 1994, 84-85).

Importantly, Frieden notes that producers of standardized goods (such as soy and its byproducts) are most sensitive to exchange rate movements. These producers compete on price alone and are vulnerable to small movements in currency values. In other words, says Frieden, the sensitivity of producers to exchange rate movements is also a function of the price elasticities of demand for their products (Frieden 1994, 86).

Calvo and Ponce take this logic a step further, asking whether currency shocks result in political realignments among economic actors, interest groups, and associations. Building on Frieden's argument, which assesses the distributive consequences of exchange rate shocks, Calvo and Ponce explore who gains political influence when a currency's value changes and whether economic actors' coalition-making strategies change based upon shifting income expectations.

The authors recognize strong barriers to change in coalitions and political influence. "Prior partisan attachment linking organized interests and politicians, for example, may be difficult to realign," they write. "Similarly, perceptions about the relative importance of economic actors or sectors in prior periods may shape the receptiveness of policy-makers to lobby by emerging economic actors" (Calvo and Ponce 2009, 2). Changing terms of trade for agriculture thus do not necessarily enhance the political clout of the Mesa de Enlace. Empirically under strong export conditions, agricultural interest groups increased their influence under President Kirchner, but have also seen this influence wane under President Fernández de Kirchner.

Evolution of Political Coalitions: Convertibility

The electoral coalition of President Menem consisted of internationally-oriented business interests, a large segment of organized labor, and consumers. What bound this coalition together was a common interest in controlling inflation, and the stability of the coalition depended on the extent to which members prioritized controlling inflation. Starr characterizes the core of the coalition as a traditional, populist coalition of the Peronist party, comprised of labor and small and medium-sized firms that produced

goods for the domestic market, as well as nationalist elements of the military (Starr 1997, 99).

Menem abandoned this platform upon taking office. Almost immediately he adopted market-oriented reforms and courted the support of internationally-oriented business interests, including large agricultural, industrial, and commercial firms. His Treasury Minister came from Bunge y Born, a multinational agribusiness and food processing corporation. Peronists, on the other hand, were relegated to ministries of labor and social welfare (Starr 1997, 100-101).

The buy-in of organized labor, however, was essential to the success of Menem's stabilization effort. Labor had traditionally opposed stabilization programs because of associated wage cuts and job losses. Labor opposition had already brought down two previous stabilization efforts, namely the Austral Plan of 1985 and the Spring Plan of 1988. There are competing theories about how Menem was able to gain labor's support, or at least weather its opposition. On the one hand, there may have been greater hesitance for labor to oppose Menem because Menem represented a Peronist government. Perhaps more powerful, however, was the fact that "concerns of most Argentine workers had ceased to be dominated by their interests as a distributional coalition and were dominated, instead, by their interests as consumers." In the end, Menem managed to corral enough of the labor vote to sustain a legislative majority and stay in office (Starr 1997, 102-108).

That said, Starr argues that the electoral component of Menem's coalition was mainly the nation's consumers, who responded positively as a result of Menem's success in controlling inflation. Starr writes (Starr 1997, 108):

No longer were their choices shaped primarily by their different economic roles as workers (skilled and unskilled), professionals, low-level managers, and small business owners. Their policy concerns were now molded by a single force which seemed to make almost no distinction among the populace as standards of living were decimated. As consumers, Argentines were now united by an overriding preference for any government that could purge the scourge of hyperinflation from the economy.

The main opposition party to Menem's program was the Radical Party, which was still reeling from having presided over the hyperinflation of the 1980s. The party was discredited and disorganized, but by the mid-1990s, as Argentina succumbed to recession following the Mexican peso crisis, Menem's coalition was beginning to dissipate of its own accord. Disillusioned by falling real wages and cuts to social programs, the CGT began making demands of the administration. Business interests, on the other hand, embodied in the Group of Eight's most important business confederations, sought labor reform and payroll tax reductions, cuts in government spending, assistance to regional economies, and support for investment. Over time, deflation "sharpened the conflict between business and labor and undermined the ability of government to meet the demands of both of these allies at the same time" (Starr, 112, 116-117). Ironically, it was Menem's success in fighting inflation that destabilized the coalition. Policy preferences shifted with the "recognition of the role which other economic forces play in shaping standards of living" (Starr 1997, 86).

In an interesting show of sectoral interest, the agricultural sector and other producers of traded goods supported Menem's coalition and convertibility system, despite the gradual real appreciation of the peso. Steinberg suspects this support was the result of a preference for stability in nominal exchange rates, expansive macroeconomic policy, and of course, compensations. He writes (Steinberg 2008, 3-4):

My coalitional theory implies that overvaluation is often politically attractive [among tradable industries] not (only) because it increases purchasing power, but because overvalued exchange rates are compatible with a variety of desirable side-policies, including subsidies and a stable nominal exchange rate ... Given the interconnections between the exchange rate's level and these other policies, it is essential to take the "policy mix" into consideration when examining the coalitional bases of over- or undervalued exchange rates.

Indeed, Steinberg writes, compensated undervaluation should be tradable producers' preferred outcome, as it includes the three desirable policies of undervaluation, expansive macroeconomic policies, and a stable currency. Nonetheless, producers of traded goods are likely to favor compensated overvaluation over uncompensated undervaluation. Removal of import barriers, cheaper imports, and

greater domestic demand are possible tactics under a compensated overvaluation regime. Overvaluation without compensation, however, is the least-preferred policy combination for tradable producers (Steinberg 2008, 6). This may most accurately describe the system in place now under President Fernández de Kirchner.

Political Coalitions Post-Convertibility: Economic Recovery and a New Populism

Measuring network connectivity between interest groups in Argentina, Calvo and Ponce find that prior to 1991, the densest network of interest group activity was between the peak industry association, the UIA; the main association of retail businesses, the Chamber of Commerce (*Cámara de Comercio*); and the main association of construction businesses, the Argentine Chamber of Construction (*Cámara Argentina de la Construcción*). The peak labor association (CGT) and the association of exporters were by extension closely connected to the UIA. Agricultural associations were connected among themselves and to some degree with the government (Calvo and Ponce 2009, 13).

Following the collapse of the fixed exchange rate regime in the aftermath of the 2001 crisis, there was a significant increase in political proximity between producers of agricultural goods and government figures, along with a significant decline in the network centrality of associations representing finance and banking. Calvo and Ponce also find a shifting coalition at the core of the economic networks, from non-tradable industries and labor before the 2001 crisis to tradable industries and agro-producers following the crisis. The densest economic networks concentrate around what they describe as the most important rural association, the Sociedad Rural, which stayed close to the Ministry of Economy and was most directly linked to the industrial union and the association of retailers. Network centrality for labor organizations and producers of non-agricultural tradable goods, meanwhile, remained unchanged (Calvo and Ponce 2009, 4, 13).

As described by Richardson, President Nestor Kirchner, who assumed power in 2003, deftly exploited the virtues of soy to build a new kind of coalition. Kirchner held together a populist coalition by combining an undervalued exchange rate (aided by high

global commodities prices) with wage-good subsidies. In other words, as undervaluation increased producer income from soy exports, the government appropriated much of this surplus income through export taxes. Subsidies for wage goods, meanwhile, helped to control inflation. “With fiscal resources available for targeted subsidies,” Richardson writes, “the government was better able to broker and support price agreements with businesses, thereby controlling inflation. In some cases, the subsidies were intended to compensate producers for the difference between international prices and the lower, officially set domestic price” (Richardson 2008, 239).

For example, Richardson cites SRA figures that predict a 4% soy-specific tax increase in 2007 generated an additional \$400 million in tax revenue, of which 30% went to the poultry industry, 30% went to dairy, and 15% went to wheat. Export tax revenue could also subsidize other wage goods, including energy, transportation, public sector salaries, and pensions. Richardson notes that these subsidies enabled the government to compensate private-sector energy and transportation firms for mandated price controls on their goods and services. Kirchner also took measures to restrict exports of wage goods. In this manner, in Richardson’s opinion, “changes in agricultural production have allowed the linking of export promotion and populism” (Richardson 2008, 229, 242-243).

A politically mobilized labor movement was also a key component of the Kirchner populist coalition. Unions backed the Kirchner government in exchange for favorable wage agreements, price controls for consumer goods, and subsidies to compensate producers. The Kirchner coalition thus continued to resemble the “broad-based benefits characteristic of classic populism in Latin America because the benefits extended to a wide spectrum of urban workers” (Richardson 2008, 230).

Two complementary conditions help explain the rise of export-oriented populism in Argentina. First, since the 2001-2002 crisis, Argentina’s formal sector has shrunk, limiting the wage demands made of the government by organized labor and thus the inflationary pressure of nominal wage increases. Second, Argentina’s soy economy has ridden a wave of high soy prices, driven by increased Chinese demand for soy-based animal feed and reductions in U.S. soy production (Richardson 2008, 245-246).

Much like Menem's coalition, Kirchner's populist alliance was fragile. As we previously discussed, Kirchner's use of soy export taxes to finance wage-good subsidies proved to be insufficient to contain the inflationary pressures of the export boom and the accompanying fiscal expansion. To the extent that inflation threatened labor's real wage gains, domestic prices threatened to unravel Kirchner's coalition. A closely related menace to Kirchner's coalition was growing rural opposition to regular increases in the tax rates on soy exports.

Fairfield notes a telling absence of formal channels of communication between the rural sector and the Kirchner administration, despite the increase in network activity described by Calvo and Ponce in the aftermath of the devaluation. The sector enjoyed little representation in Kirchner's Ministry of Economy. Economy ministers between 2002 and 2008 included an industrialist, a board member of the Bank of the Province of Buenos Aires, and a chairman of the Bank of the Province of Buenos Aires. Kirchner's Secretary of Internal Commerce had no ties to agriculture. Even the secretaries of agriculture between 2003 and 2008 did not have strong ties to producer associations and were subordinate to the Ministry of Economy. During this time there were no institutionalized consultations between the government and producer associations, a la President Alfonsín's council for state agricultural consultation in the latter half of the 1980s (Fairfield 2011, 433-434).

Meanwhile, producers did not comprise a core constituency for any electorally significant political party, nor did they enjoy informal ties to legislators. Fairfield attributes this latter weakness to party discipline within the governing coalition. "Party-centered electoral institutions," she writes, "give national and provincial party leaders strong control over legislators who might otherwise favor special interests, particularly when major policy initiatives are at stake." Top-down, uncontested leadership within the Peronist party following the 2005 mid-term elections made Peronist governors and legislators less likely to challenge the president on his economic policy. And, as previously mentioned, "export tax policy was an area of exclusive executive authority, rendering the producers' relationships with legislators irrelevant" (Fairfield 2011, 435).

Producers were further hindered by a powerful collective action problem stemming from conflicting interests and geographic dispersion. The failure to reach consensus between the four major producer associations limited the resources needed to influence economic policy. The FAA, for example, was open to segmented export taxes if the tax revenue funded benefits for small producers. Even potential interest articulation strategies grounded in protest were subject to the same collective action constraints. Fairfield notes that the four producers associations diverged in their views of protest. Whereas the CRA and FAA advocated protest, the SRA and CONINAGRO favored dialogue with the government, arguing that strikes imposed high costs on producers, were difficult to coordinate and sustain, and rarely accomplished their objectives. Fairfield writes that the CRA's decentralized, bottom-up structure was conducive to protest. On the other hand, she writes:

The SRA's preference for dialog is not surprising given its history of excellent access to the executive branch through recruitment into government and informal ties to high-level officials. Although the SRA lacked these sources of power under Kirchner, the government's willingness to listen to its complaints, if not change its policies, encouraged the SRA to adhere to its traditional political repertoire.

The 2008 export tax increase “demonstrated for the first time that there were limits to the use of this otherwise highly effective and politically attractive tax instrument” (Fairfield 2011, 425, 436).

Interest Articulation of the Mesa de Enlace in the Fernández de Kirchner Era

Producers of a wide variety of goods have expressed their discontent with Fernández de Kirchner's economic policies. The expression of this discontent is couched in terms of government interference and tax withholdings, inflation, and real exchange rate overvaluation. There is also a deep frustration with lack of access or communication with the executive branch.

Tellingly, in an article published by *La Nación* in January 2012, Eduardo Buzzi, president of the FAA, made clear that his priority in this process was not drought, but rather the economic conditions hurting productivity. “Without a doubt,” he is quoted, “the main problem is not the drought. That is a phenomenon that aggravates the loss of competitiveness suffered by producers due to increased costs, inflation, and currency overvaluation. I am not saying the exchange rate should be adjusted, but we should talk about withholdings” (Colombres 2012).

The members of the Mesa de Enlace seem united in their assessment of the threat that the current policy climate poses to their agricultural competitiveness. In a June 2012 interview with *La Opinión Line*, Rubén Ferrero, president of the CRA, recognized setbacks in sheep production in the south and fruit production in the Valle de Río Negro, and transport problems in the northern provinces. But, he stressed, these setbacks occurred within a punishing policy framework that consistently drives up costs. Specifically, he called attention to “the high taxes and imposing charges that we must navigate, in addition to one of the worst exchange rate scenarios. Today, including withholdings, producers are exporting at 2.8 pesos/dollar; and we must buy many of our supplies at 5.8 or 5.9 pesos/dollar, depending on the parallel exchange rate [of the blue back]”. These frustrations span both crop and region. In Entre Ríos, for example, orange farmers in 2012 called for government subsidies so as to avoid flooding the domestic market with surplus oranges that could not be exported due to inflation and overvaluation, contending that these forces have increased the cost of fuel, road tolls, labor, boxes, and electricity (Toller 2012).

In 2012, in response to drought conditions throughout the country, the Minister of Agriculture, Norberto Yauhuar, drew up plans for a Committee for Agricultural Emergencies to assess and respond to the needs of agricultural producers (Ministry of Public Relations 2012). Shortly thereafter, the ministry agreed to begin an open and permanent dialogue with the Mesa de Enlace. Encouraged by the prospect for dialogue, the Mesa de Enlace submitted 17 proposals it felt would increase the sector’s competitiveness (*La Opinión*, 2012).

In an article written for *La Nación*, Colombres notes that this ministerial commitment to engagement represented the first attempt at dialogue between the administration and the Mesa de Enlace in several months. It represented a significant departure from the strategy of Yauhar's predecessor, Julián Domínguez. Domínguez engaged the Mesa de Enlace either through limited discussions in the context of the Strategic Agricultural Plan, in which case technical personnel represented the government; or individually, a strategy intended to soften demands and divide the coalition (Colombres 2012). But over the course of a few months, the Mesa de Enlace began to suspect that the government was not seriously committed to a dialogue. In response to these concerns, the committee initiated a work stoppage in June 2012.

In Ferrero's view, and (according to the *La Opinión*) in the view of the Mesa de Enlace, the June 2012 strike had as much to do with a perceived cold shoulder from the government as it had to do with fiscal and monetary conditions. Ferrero continues, "All of these things have been hurting the profitability of producers and what we are trying to do with this protest is bring that to light, while at the same time making space for a campaign to clarify for the public what is truly happening. Having not been summoned to meet, we have reached this stage" (*La Opinión*, 2012).

Ferrero's comments demonstrate a clearly defined attempt to spread awareness and frame the debate so as to bestow legitimacy upon the positions of the Mesa de Enlace and sway public opinion. He stresses that the losses in the agricultural sector affect all sectors of the economy, noting that "the public has to understand what is happening to the costs of production and the disparity between what the producer earns and what the consumer pays" (*La Opinión*, 2012). Ferrero is cognizant of the cost that protest imposes upon society, and he stresses that the Mesa de Enlace is averse to causing shortages and civil unrest.

Statements made by Eduardo Buzzi, president of the FAA, similarly frame the debate as a conflict between the government and the public, rather than between competing productive sectors. The coalition seems to be making a concerted effort not to alienate the public. During the June 2012, for example, the Mesa de Enlace called for a

stoppage of services for non-perishable goods only. The commission has also refrained from calling for devaluation. Indeed, for some members of the Mesa de Enlace, overvaluation of the real exchange rate boils down to the withholding of export revenue. In an interview with *Los Andes*, however, Ferrero notes that those most concerned about overvaluation are producers of industrial goods; the producers of the CRA could alleviate that problem with the removal of the *retenciones* (*Los Andes*, 2012).

Conclusion

If not monetary policy itself, the impacts of monetary policy in the form of inflation and exchange rate overvaluation are key components of the Mesa de Enlace's articulated interest. The agricultural sector enjoyed a window of access to the executive branch in the immediate aftermath of the economic crisis, but since then has run up against age-old collective action constraints. Cohesive interest articulation in the sector tends to occur as the culmination of reactionary responses to what are perceived as confiscatory government measures and seems to lack long-term vision for a structural environment conducive to benefitting agricultural interests. While the Mesa de Enlace is frustrated by the real appreciation of the peso as a result of inflation, one finds little direct reference to Central Bank governance in Mesa de Enlace communications.

Within the constraints of the policymaking process, the Mesa de Enlace's preferred strategy seems predicated on two tactics: the threat of social protest as a bargaining chip for influence with a powerful executive branch; and legitimacy of the coalition's positions in the public discourse. But as the shortcomings of the so-called agro-deputies suggest, the sector may be better served broadening its economic platform beyond its opposition to export tax withholdings.

Concluding Remarks: Is the Argentine Case Study Indicative of Broader International Trends in Central Banking?

Argentina offers a compelling narrative common to countries that rely on agricultural exports for growth. After all, Argentina's monetary practices and strategies for intervention in agricultural markets are not unique amongst agrarian and agro-industrial nations. Many countries, for example, both net importers and net exporters, have taken concrete measures to insulate their domestic markets from high global food prices. The Argentine case may guide policymakers considering alternative monetary regimes, monetary governance strategies for cash crop production and the sale of cash crops on international markets, and the costs and benefits of export tariffs.

More generally, in the wake of the 2008 global financial crisis, there may be lessons to infer about an appropriate *modus operandi* for central banks in agricultural and non-agricultural countries alike. In responding to the post-crisis global credit crunch, central bank mandates have broadened throughout much of the industrialized world. Central banks have assumed greater responsibility for financial stability and unemployment in their respective countries, and in some cases for stimulating and regulating allocation of credit.

The BCRA, in its own right, points explicitly to what it calls an “unequivocal link” between a country's monetary and financial stability and events in the real economy (BCRA *Programación* 2013, 2). Still, with the lessons of the 2001 financial crisis still fresh in Argentines' minds, the BCRA remains wary of easy money policies in the U.S. and Europe, and concomitant movements of capital toward emerging economies. Argentina's new central bank charter will likely be judged in a brave new economic order.

Response of agricultural sector to a broadening central bank mandate will depend on several factors. The first is the export orientation of production. The extent to which agriculture is tied to the international marketplace will determine the sector's interest in

the real exchange rate and the distributive consequences of sectoral political action. Closely related to this is the relationship between export goods and wage goods. An agricultural coalition will more effectively articulate a monetary platform if its monetary interests do not directly conflict with the monetary interests of the industrial sector.

A second factor that will likely drive the agricultural response to expanding Central Bank mandates is the predictability of the policymaking process. As is the case for most economic actors, agricultural producers have a strong preference for stability. Under conditions of expanded monetary flexibility, policymakers must arrest forces of corruption, political horse-trading, and incentives for opportunistic fiscal behavior that will encourage strong actors to take advantage of this monetary flexibility (and politicize Central Bank operations), at the expense of macroeconomic stability.

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